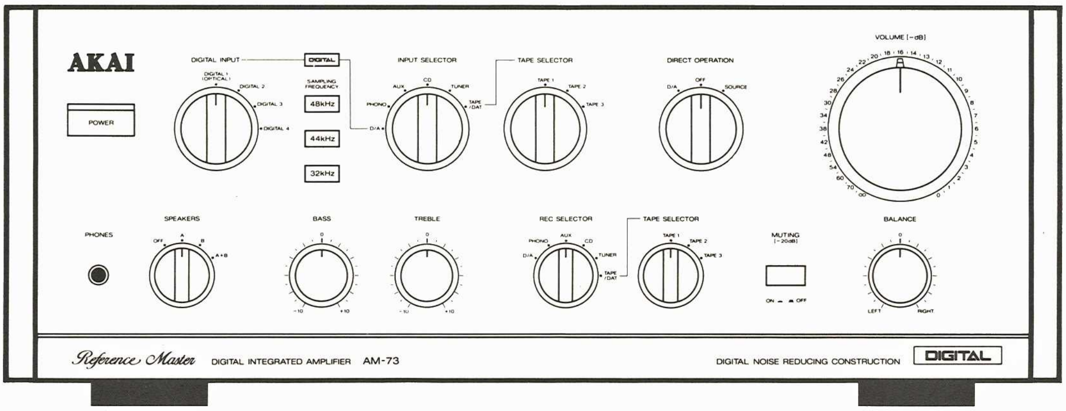
AKAI SERVICE MANUAL


AKAI
POWER
DIGITAL INPUT
DIGITAL 1 (OPTICAL)
DIGITAL 2
DIGITAL 3
DIGITAL 4
DIGITAL
SAMPLING FREQUENCY
48kHz
44kHz
32kHz
INPUT SELECTOR
PHONO
AUX
CD
TUNER
TAPE /DAT
D/A
TAPE SELECTOR
TAPE 1
TAPE 2
TAPE 3
DIRECT OPERATION
D/A
OFF
SOURCE
VOLUME [-dB]
PHONES
SPEAKERS
OFF
A
B
A+B
BASS
TREBLE
0
-10
+10
REC SELECTOR
MUTING [-20dB]
ON
OFF
BALANCE
LEFT
RIGHT
Reference Master
DIGITAL INTEGRATED AMPLIFIER AM-73
DIGITAL NOISE REDUCING CONSTRUCTION
DIGITAL

DIGITAL INTEGRATED AMPLIFIER

MODEL AM-73

SPECIFICATIONS

Power output	150 W + 150 W (DIN. 4 ohms) 100 W + 100 W (FTC, 8 ohms)
Power band width	10 Hz to 60 kHz/0.1%
Total harmonic distortion	0.008% (1 kHz, 8 ohms)
Phone max. input level	250 mV (MM)
Frequency response	3 Hz to 100 kHz (+0 dB, −3 dB)
Tone control	
TREBLE	±10 dB (10 kHz)
BASS	±10 dB (100 Hz)
Input sensitivity/Impedance	
PHONO (MM)	2.5 mV/47 kohms
TUNER, etc.	150 mV/47 kohms
Output level/Impedance	
TAPE REC OUT	150 mV/1 kohms
Damping factor	30 (1 kHz)
Residual noise	0.5 mV
S/N	
PHONO (MM)	85 dB
TUNER, etc.	100 dB

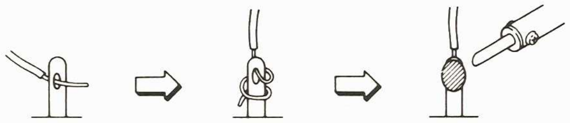
Channel separation	60 dB
Audio mute	−20 dB
Required speaker impedance	
A or B	6 to 16 ohms
A and B	12 to 16 ohms
Sampling frequency	32 kHz/44.1 kHz/48 kHz
Digital filter	4 fs, 16 bit
D/A converter	16 bit, 2 DAC
Digital input level/Impedance	
COAXIAL	0.5 Vp-p/75 ohms
OPTICAL	−14 to −23 dBm
Frequency response	5 Hz to 20 kHz (±0.3 dB)
Dynamic range	95 dB
Total harmonic distortion	0.003%
Channel separation	115 dB
Dimensions	461 (W) × 177 (H) × 452 (D) mm
Standard accessories operators manual	1
Weight	17.7 kg (38.9 lbs)

* For improvement purposes, specifications and design are subject to change without notice.

★SAFETY INSTRUCTIONS

PRECAUTIONS DURING SERVICING

1. Parts identified by the ⚠ (∗) symbol parts are critical for safety. Replace only with parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation.
   These must also be replaced only with specified replacements.
   Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers (Insulating Barriers)
   4) Insulation sheets for transistors
   5) Plastic screws for fixing microswitch (especially in turntable)
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.



6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

SAFETY CHECK AFTER SERVICING

Confirm the specified insulation resistance between power cord plug prongs and externally exposed parts of the set is greater than 10 M ohms. but for equipment with external antenna terminals (tuner, receiver, etc.) and is intended for C or A , specified insulation resistance should be headphone jacks line-in-out jacks etc. more than 2.2 M ohms (ground terminals, microphone jacks).

★INFORMATION

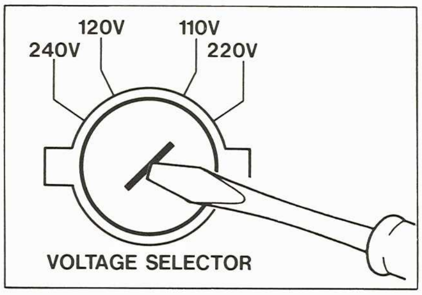
SYMBOLS FOR PRIMARY DESTINATION

Alphabet indicates the destination of the units as listed below.

Symbols	Principal Destinations
A	USA
B	UK
C	Canada
E	Europe (except UK)
J	Japan
S	Australia
V	W. Germany only
U	Universal Area
Y*	Custom version

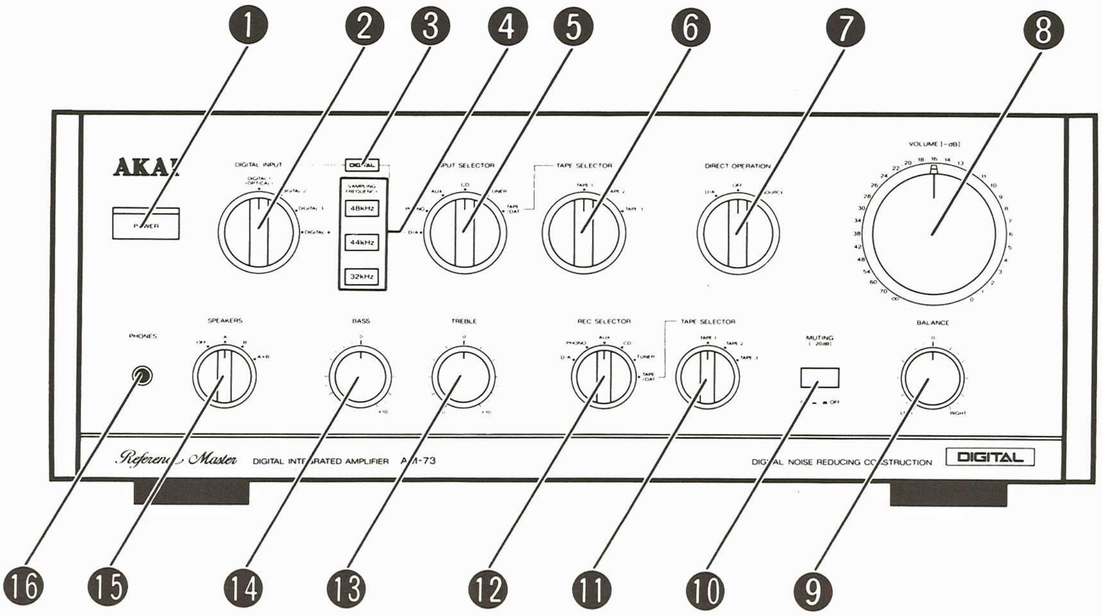
VOLTAGE CONVERSION (U Model only)

Before connecting the power cord. SET the VOLTAGE SELECTOR located on the rear panel with a screwdriver so that the correct voltage is indicated.



I. CONTROLS

1-1. FRONT PANEL


❶
❷
❸
❹
❺
❻
❼
❽
AKAI
POWER
DIGITAL INPUT
DIGITAL
SAMPLING FREQUENCY
48kHz
44kHz
32kHz
INPUT SELECTOR
TAPE SELECTOR
DIRECT OPERATION
VOLUME (-dB)
PHONES
SPEAKERS
BASS
TREBLE
REC SELECTOR
TAPE SELECTOR
MUTING
BALANCE
Reference Master
DIGITAL INTEGRATED AMPLIFIER AM-73
DIGITAL NOISE REDUCING CONSTRUCTION
DIGITAL
⓰
⓯
⓮
⓭
⓬
⓫
❿
❾

❶ **POWER Button and Indicator**
To turn the power on and off.
The indicator will flash on and off when the speaker protection circuit is engaged.

❷ **DIGITAL INPUT Switch (DIGITAL 1. (OPTICAL), IGITAL DIGITAL 2/3/4)**
To select the digital input source.

❸ **DIGITAL Indicator**
Tells you the INPUT SELECTOR switch or the DIRECT OPERATION switch is set to D/A.

❹ **SAMPLING FREQUENCY Indicators (32 kHz/44 kHz/48 kHz)**
Tells you the sampling frequency of the digital source being played back.

❺ **INPUT SELECTOR Switch**
To select the playback source you wish to listen to.

❻ **TAPE SELECTOR Switch**
To select the cassette deck or DAT deck being used for playback.

❼ **DIRECT OPERATION Switch**
To select the playback operation mode. If you wish to use the BASS, TREBLE or BALANCE controls, set the switch to OFF.

❽ **VOLUME Control (−dB: minus decibel)**
To adjust the volume level. The 0 dB (zero decibel) position is the maximum volume output of the amplifier.

❾ **BALANCE Control**
To adjust the left and right channel balance.
Normally set the control to 0.

❿ **MUTING Switch**
To reduce the volume instantly during playback without using the VOLUME control.

⓫ **TAPE SELECTOR Switch**
To select the cassette deck or DAT deck being used for recording.

⓬ **REC SELECTOR Switch**
To select the playback source for recording.

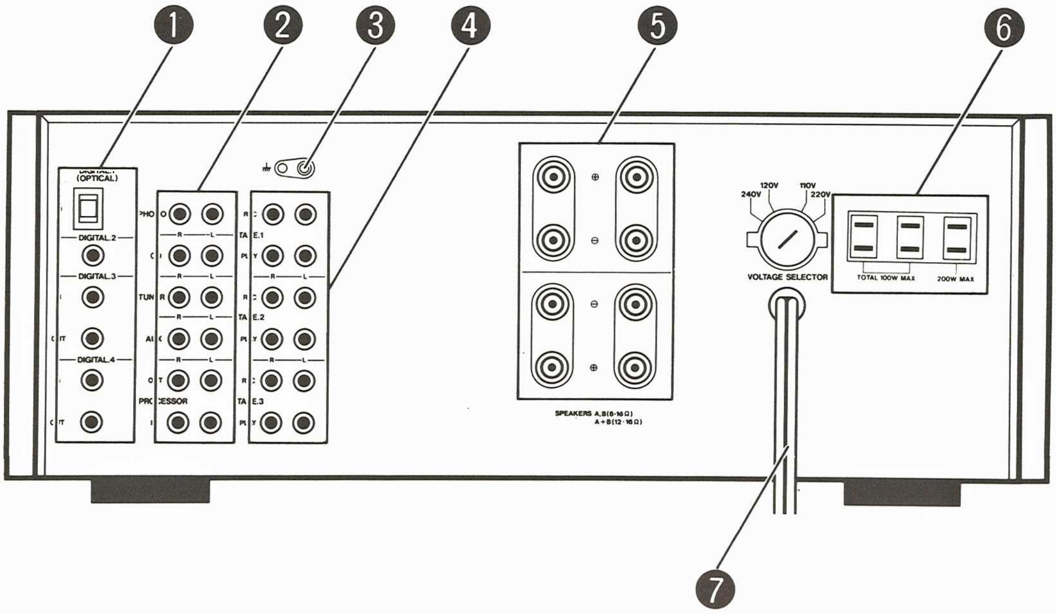
⓭ **TREBLE Tone Control**
To adjust the high note (treble) level. When set to 0, the control is ineffective.

⓮ **BASS Tone Control**
To adjust the low note (bass) level. When set to 0, the control is ineffective.

⓯ **SPEAKERS Switch**
To select the speaker system.
For headphone listening, set the switch to OFF. When using two pairs of speaker systems at the same time, set the switch to A+B.

⓰ **PHONES Jack**
For headphone listening.
Connect the headphone plug to the jack.

1-2. REAR PANEL



❶ **Digital Signal Connection Terminal and Jacks**
For connection of components with DIGITAL INPUT or OUTPUT jacks.

DIGITAL.1 (OPTICAL) IN Terminal and terminal cap
Use this terminal when connecting a CD player or DAT deck that has an optical output terminal. (Use an optical fiber cable available in hi-fi stores for connections).

DIGITAL. 2 IN Jack
Use this jack when connecting a CD player or DAT deck that has a digital coaxial output jack. (Use an optical or digital video connection cable available in hi-fi stores for connections).

DIGITAL. 3, 4 IN and OUT Jacks
Use these jacks when connecting a DAT deck that has digital coaxial input and output jacks. (Use an optical or digital video connection cable available in hi-fi stores for connections).
The DIGITAL OUT jack can be used for connection of a DAT deck for digital tape dubbing or a DSP (Digital Sound Processor).

❷ **Analog Connection Jacks**
These jacks are for conventional signal (analog) connections. The white PIN-jacks are for left channel connections and the red PIN-jacks are for right channel connections.

PHONO Jacks
Connect the output PIN-plug cord of a turntable to these jacks.

CD Jacks
Connect the OUTPUT jacks of a CD player to these jacks with an audio PIN-plug cord.

TUNER Jacks
Connect the OUTPUT jacks of a tuner to these jacks with an audio PIN-plug cord.

AUX Jacks
Connect the OUTPUT jacks of an auxiliary source such as a cassette deck, DAT deck or CD player to these jacks with an audio PIN-plug cord.

PROCESSOR IN and OUT Jacks/Short pins
For connection of a graphic equalizer or surround processor with an audio PIN-plug cord.
Remove the two short pins from these jacks before connecting. Leave these pins in place when a graphic equalizer or surround processor is not connected to these jacks.

❸ **⏚ (Earth) Terminal**
If your turntable has an earth wire, connect it to this terminal.

❹ **Analog Tape Connecting Jacks**
For connection of cassette decks or DAT decks that have analog OUTPUT and INPUT jacks.

TAPE. 1, TAPE. 2 and TAPE. 3 Jacks (REC/PLAY)
Connect the INPUT jacks of a cassette deck or DAT deck to the REC jacks with an audio PIN-plug cord.
Connect the OUTPUT jacks of a cassette deck or DAT deck to the PLAY jacks with an audio PIN-plug cord.

❺ **SPEAKERS A, B Terminals**
For speaker system connections. The A terminals correspond to the A position of the SPEAKERS switch and the B terminals correspond to the B position. Red terminals are the + (plus) terminals and black terminals are the — (minus) terminals.

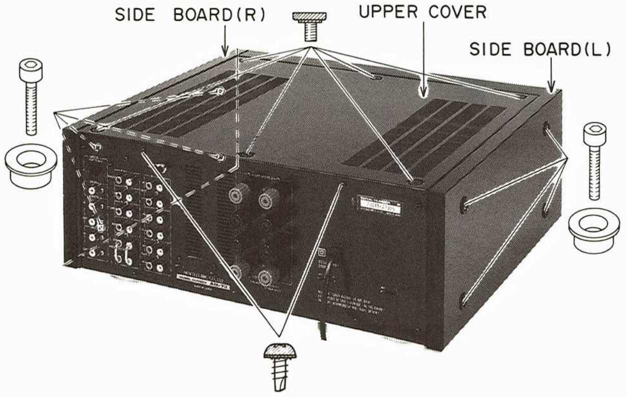
❻ **AC OUTLETS (Not on all models)**
For connection of audio equipment power cords (tuner, CD player, cassette deck, DAT deck etc.).
The maximum connected power consumption is 300 Watts. Do not exceed the maximum power consumption indicated on the rear panel of the amplifier.
The UNSWITCHED outlets supply power when the power cord of the amplifier is connected to a household AC outlet. The power to the SWITCHED outlet is turned on and off by the amplifier's POWER switch.

❼ **Power cord and plug**
Connect to a household AC outlet. If you wish to use an audio timer, connect the power cord to the timer's AC outlet.

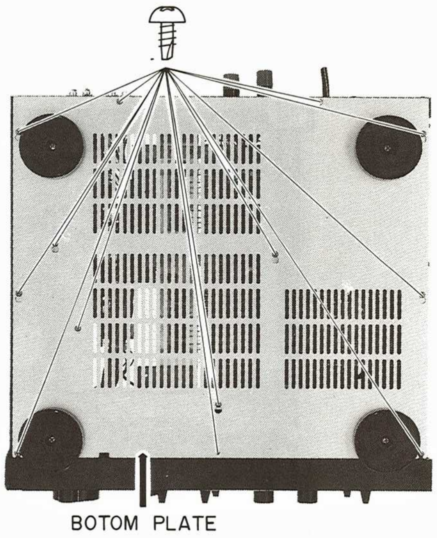
II. DISASSEMBLY

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.

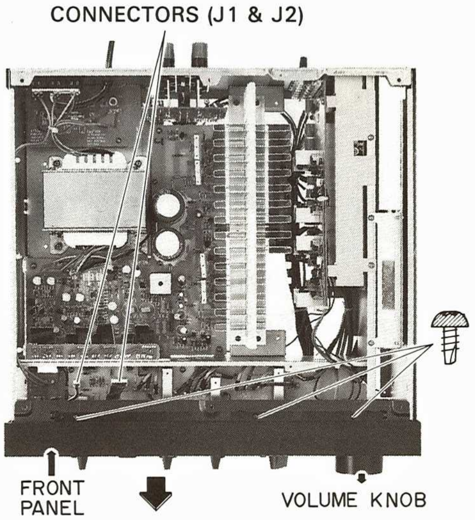
1. Removal of UPPER COVER


SIDE BOARD(R)
UPPER COVER
SIDE BOARD(L)

2. Removal of BOTTOM PLATE & FRONT PANEL


BOTOM PLATE

3\.


CONNECTORS (J1 & J2)
FRONT PANEL
VOLUME KNOB

※ Disconnect CONNECTORS (J1 & J2) and remove VOLUME KNOB first, then remove FRONT PANEL next.

III. PRINCIPAL PARTS LOCATION

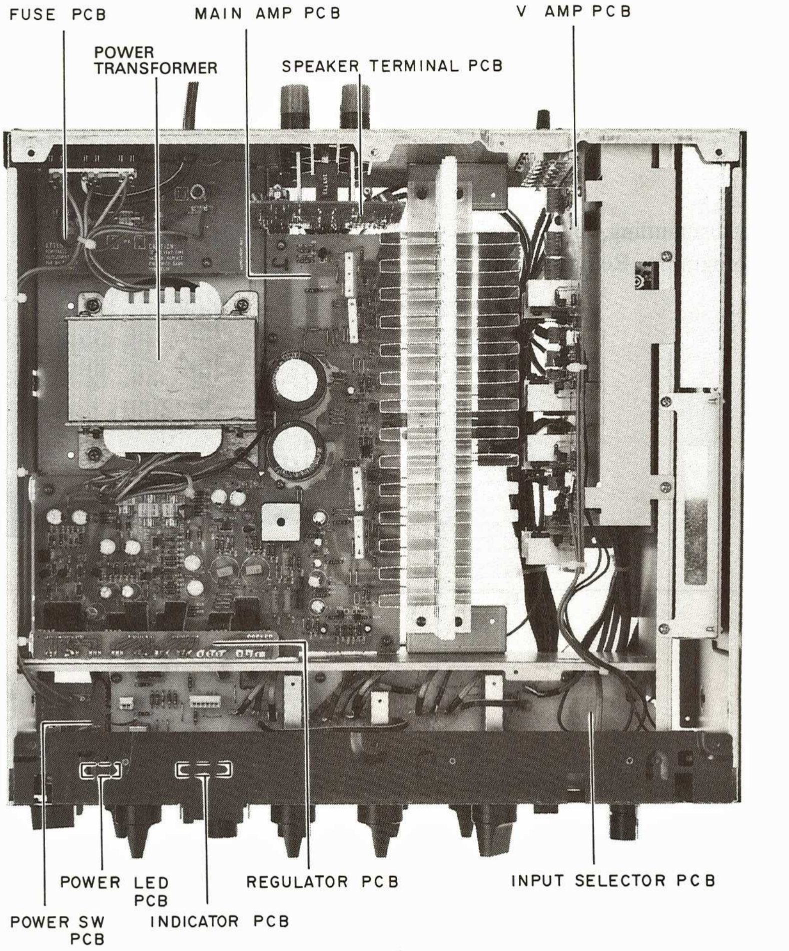

FUSE PCB
POWER TRANSFORMER
MAIN AMP PCB
SPEAKER TERMINAL PCB
V AMP PCB
POWER LED PCB
REGULATOR PCB
INPUT SELECTOR PCB
POWER SW PCB
INDICATOR PCB

Fig. 3-1 Top View

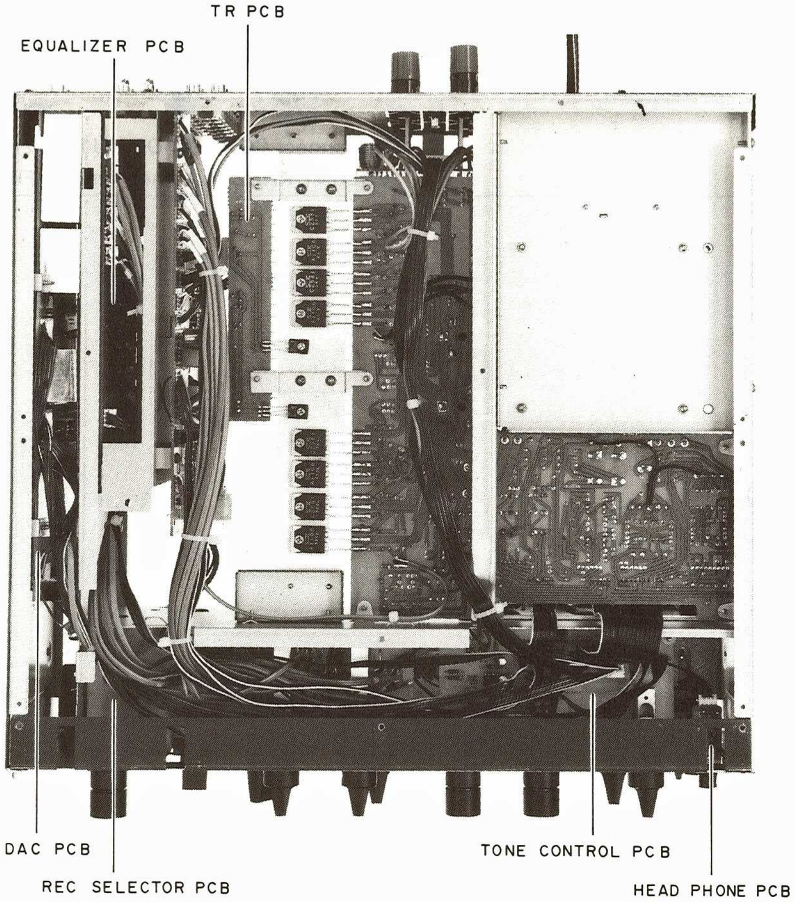

TR PCB
EQUALIZER PCB
DAC PCB
REC SELECTOR PCB
TONE CONTROL PCB
HEAD PHONE PCB

Fig. 3-2 Bottom View

IV. ELECTRICAL ADJUSTMENT

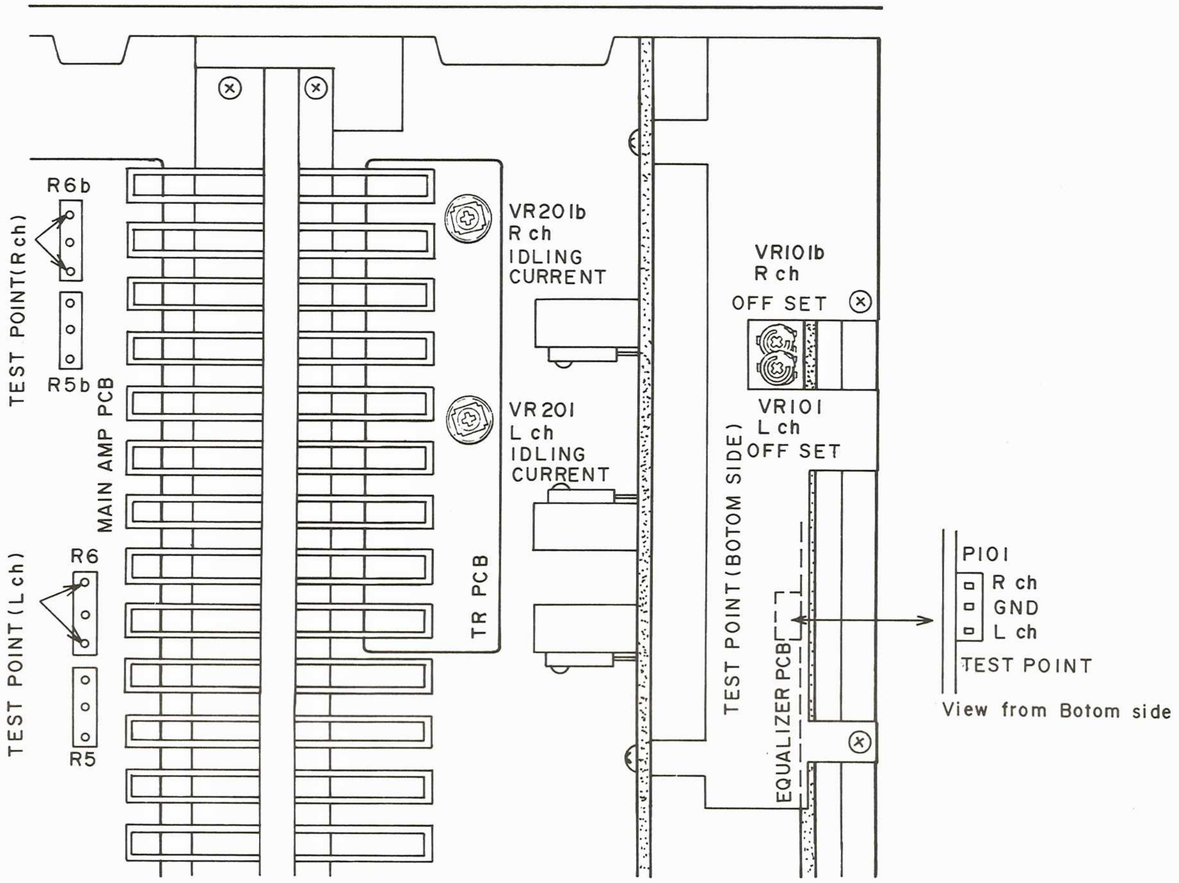

R6b
TEST POINT(R ch)
R5b
MAIN AMP PCB
R6
TEST POINT (L ch)
R5
VR201b
R ch
IDLING
CURRENT
VR201
L ch
IDLING
CURRENT
TR PCB
VR101b
R ch
OFF SET
VR101
L ch
OFF SET
TEST POINT (BOTOM SIDE)
EQUALIZER PCB
P101
R ch
GND
L ch
TEST POINT
View from Botom side

Fig. 4-1 Idling current, OFF-SET Adjustment parts and Test points

4-1. IDLING CURRENT ADJUSTMENT (Refer to Fig. 4-1)

NOTE: This adjustment should be made after 5 minutes passed from turning the power on.

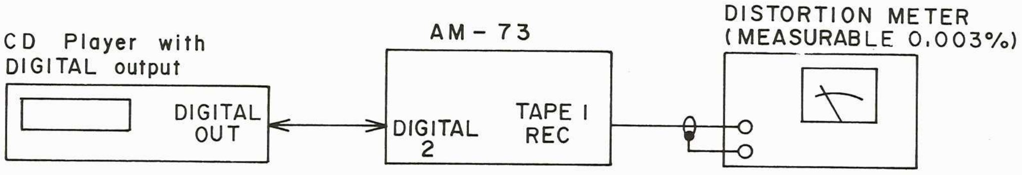
1) Connect the Digital DC Voltmeter between both ends of cement type resistor R5 or R6 (L-CH), R5b or R6b (R-CH) on the MAIN AMP PCB.
2) Adjust VR201 (L-CH), VR201b (R-CH) on the TR PCB, so that the reading on the Digital DC Voltmeter is 30 mV.

4-2. OFF-SET ADJUSTMENT OF PHONO AMPLIFIER (Refer to Fig. 4-1)

NOTE: This adjustment should be made after 5 minutes passed from turning the power on.

1) Connect the Digital DC Voltmeter between Pin ① (L-CH), Pin ③ (R-CH) and Pin ② (GND) on the EQUALIZER PCB.
2) Adjust VR101 (L-CH), VR101b (R-CH) on the EQUALIZER PCB, so that the reading on the Digital DC Voltmeter is 0 V.

4-3. DISTORTION ADJUSTMENT OF D/A CONVERTOR


CD Player with
DIGITAL output
DIGITAL OUT
AM-73
DIGITAL 2
TAPE 1 REC
DISTORTION METER
(MEASURABLE 0.003%)

INPUT SELECTOR : D/A
DIGITAL SELECTOR : DIGITAL 2
REC SELECTOR : D/A
TAPE SELECTOR : TAPE 1

Fig. 4-2 Instrument connection

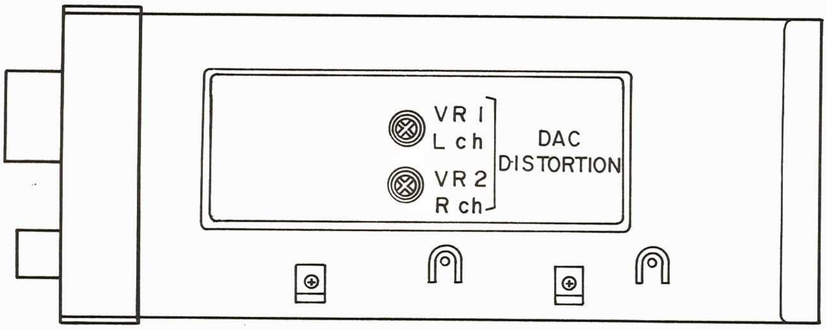

VR 1
L ch
VR 2
R ch
DAC
DISTORTION

Fig. 4-3 Adjustment part of DAC PCB

1) Connect a CD player which has a digital output terminal to DIGITAL 2 IN, and connect Distortion meter to TAPE 1 REC Terminal.
2) Set the Selector switches on the Front panel as follow.

INPUT SELECTOR:	D/A
DIGITAL SELECTOR:	DIGITAL 2
REC SELECTOR:	D/A
TAPE SELECTOR:	TAPE 1

3) Insert a test disc TYPE III (AT-711881) into CD PLAYER and play it 1 kHz.
4) Adjust VR1 (L-CH), VR1b (R-CH) on the DAC PCB so that the reading on the Distortion meter is at minimum (less than 0.01%).

V. PARTS LIST

ATTENTION

1. **When placing an order for parts, be sure to list Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.**
2. **Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.**
3. **Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.**

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

2. HEAD BASE BLOCK

REF. NO.	PART NO.	DESCRIPTION
2-1x	BH-T2023A320A	HEAD BASE BLOCK
2-2	HP-H2206A010A	HEAD R/P PR4-8FU C
2-3	ZS-477876	PAN20×03STL CMT
2-4	ZS-536488	BID20×08STL CMT
2-5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification

A small "x" indicates that this part is not shown in the Photo or Illustration.

This number corresponds with the individual parts index number in that figure.

This number corresponds with the Figure Number.

b) PC Board

6. MAIN PC BOARD

REF. NO.	PART NO.	DESCRIPTION
6-IC1	EI-324536	IC HD14049BP
6-IC2	EI-336801	IC MB8841-564M
6-C1A	EC-338399	C MMY V 223M 250AC [U,E,B,S]
6-C1B	EC-350949	C MMY V 223M 250DC [J]
6-C1C	EC-338397	C MMY V 223M 125AC [C,A]
6-X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination

[A]: AAL(U.S.A.)	[S]: SAA(Australia)
[B]: BEAB(England)	[U]: U/T(Universal Area)
[C]: CSA(Canada)	[V]: VDE(W. Germany)
[E]: CEE(Europe)	[Y]: Custom Version
[J]: JPN(Japan)	

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No. listed at right of Part No.

WARNING

⚠ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

⚠ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÉCES RECOMMANDEES PAR LÉ FABRICANT.

1. RECOMMENDED SPARE PARTS

Ref. No.	Part No.	Description
1	BT-368261	TRANS PULSE TC-1027-04
2	ED-356424	D LED BG5525S GREEN
3	ED-382620J	D LED PG5562X GREEN
4	ED-382611J	D LED PY5504S YELLOW
5	ED-361885	D LED SLP-384C-51 GREEN
6	*ED-379981J	D SILICON EG01LF-F4 F10 400/0.7A
7	ED-348990	D SILICON H DS446
8	ED-301911	D SILICON H DS448
9	*ED-382668J	D SILICON PB-112F
10	ED-346560	D ZENER H HZ12L B3
11	ED-346564	D ZENER H HZ15L 1
12	ED-377933	D ZENER H HZ27L 3 F10
13	ED-381270J	D ZENER H HZ33L 1 F10
14	ED-343410	D ZENER H HZ6L A1
15	ED-346529	D ZENER H HZ6L C2
16	ED-351418	D ZENER H HZ7L B1
17	*EF-355226	FUSE BET T 250V 1.00A [B]
18	*EF-359086	FUSE BET T 250V 4.00A [B]
19	*EF-623103	FUSE SEMKO T 250V 1.00A [E,V]
20	*EF-690996	FUSE SEMKO T 250V 4.00A [E,V]
21	*EF-306952	FUSE TSC A 250V 4.00A [U]
22	*EF-327103	FUSE TSC A 250V 500MA [U]
23	*EF-309388	FUSE TSC A 250V 800MA [U]
24	*EF-309390	FUSE TSC 125V 500MA [C,A]
25	*EF-345658	FUSE TSC 125V 8.00A [C,A]
26	*EF-309391	FUSE TSC 125V 800MA [C,A]
27	EI-381282J	IC CXD-1162P
28	EI-345474	IC HA12002
29	EI-375346	IC MM74HC04N
30	EI-344764	IC M5218P-21
31	EI-362588	IC M5238P
32	EI-377191	IC NJM5532D-D
33	EI-368612	IC PCM56P
34	EI-360040	IC TC74HCU04P
35	EI-360037	IC TC74HC00P
36	EI-360039	IC TC74HC08P
37	EI-356049	IC TC74HC139P
38	EI-378921J	IC TC74HC151P
39	EI-379997J	IC YM3623B
40	EI-374176	OSC X'TAL AT-51 16.9344MHZ
41	EJ-379983J	TERMINAL W/SCREW YKD31-0338 8P [SPEAKER TERMINAL]
42	EQ-379982J	RELAY POW G5R-2282P 2NO 48V
43	EQ-348929	RELAY SIG G5A-237P 2TR 12V
44	ER-368226	R CT P R33+R33 5W
45	*ES-355407	SW PUSH ESB-99713V TV-8 [POWER SW]
46	ES-378941J	SW PUSH SPUL12 2-04-02S [MUTE]
47	ES-379984J	SW ROTARY SRRZS4 2-04-04N [SPEAKER SELECTOR]
48	ES-379986J	SW ROTARY SRRZS6 2-06-06N [REC SELECTOR]
49	ES-379988J	SW ROTARY SRRZS8 2-08-03N [TAPE SELECTOR]
50	ET-360646	TR DTA143ES
51	ET-354371	TR DTC124ES
52	ET-357162	TR FET 2SJ74 GR,BL,V
53	ET-354897	TR FET 2SK170 BL,GR,V
54	*ET-359827	TR FET 2SK246 BL
55	*ET-338244	TR 2SA1207 R,S
56	ET-345460	TR 2SA1208 R,S,T
57	ET-348829	TR 2SA1209 S,T
58	*ET-345626	TR 2SA1248 S,T
59	ET-352726	TR 2SA1392 T,U
60	*ET-368757	TR 2SA1490 P,Y
61	*ET-368758	TR 2SA1491 P,Y
62	*ET-348830	TR 2SC2909 S,T
63	ET-370038	TR 2SC2910 S,T
64	ET-348831	TR 2SC2911 S,T
65	*ET-345625	TR 2SC3116 S,T
66	ET-360067	TR 2SC3330 T,U F05
67	ET-349081	TR 2SC3383 S,T
68	*ET-368759	TR 2SC3854 P,Y
69	*ET-368760	TR 2SC3855 P,Y
70	*ET-349459	TR 2SD1406 O,Y,GR
71	EV-379987J	SW ROTARY SRRZS6 2-06-03N [TAPE SELECTOR]
72	EV-379994J	VR ROTARY RK1631110 SPL W104 [BALANCE]
73	EV-379992J	VR ROTARY RK1631210 C104X2 [BASS CONTROL]
74	EV-379993J	VR ROTARY RK1631210 C104X2 [TREBLE CONTROL]
75	EV-379989J	VR ROTARY RK16314A0 A104X4 [MAIN VOLUME]

2. P.C BOARD BLOCK

Ref. No.	Part No.	Description
1A	BA-A2057A020A	PC(#) MAIN BLK AM-73(U) [U]
1B	BA-A2057A020C	PC(#) MAIN BLK AM-73(C) [C,A]
1C	BA-A2057A020D	PC(#) MAIN BLK AM-73(E) [E,B]
1D	BA-A2057A020E	PC(#) MAIN BLK AM-73(V) [V]
2A	BA-A2057A030A	PC(#) VAMP BLK AM-73(U) [U,C,A,E,B]
2B	BA-A2057A030C	PC(#) VAMP BLK AM-73(V) [V]
3A	BA-A2057A040A	PC(#) INPUT BLK AM-73(U) [U,C,A,E,B]
3B	BA-A2057A040B	PC(#) INPUT BLK AM-73(V) [V]
4	BA-A2057A050A	PC DAC BLK

PC (#) MAIN BLK CONSISTS OF FOLLOWING P.C BOARD.

* MAIN AMP P.C BOARD
* SPEAKER TERMINAL P.C BOARD
* FUSE P.C BOARD
* POWER SW P.C BOARD
* INDICATOR P.C BOARD
* POWER LED P.C BOARD
* HEADPHONE P.C BOARD
* REGULATOR P.C BOARD

PC (#) V-AMP BLK CONSISTS OF FOLLOWING P.C BOARD.

* V-AMP P.C BOARD
* EQUALIZER P.C BOARD
* TR P.C BOARD

PC (#) IMPUT BLK CONSISTS OF FOLLOWING P.C BOARD.

* INPUT P.C BOARD
* TONE CONTROL P.C BOARD
* REC SELECTOR P.C BOARD

3. MAIN AMP P.C BOARD

Ref. No.	Part No.	Description
C1	EC-381263J	C EC V SNP 103M 63.0DC
C2	EC-381263J	C EC V SNP 103M 63.0DC
C11	EC-324074	C EC V CUT AS1 101M 63.0DC
C12	EC-324074	C EC V CUT AS1 101M 63.0DC
C13	EC-380325J	C PP V MKP1841 104J 250DC
C14	EC-380325J	C PP V MKP1841 104J 250DC
C17	EC-201636	C EC V CUT AS1 470M 100DC
C18	EC-201636	C EC V CUT AS1 470M 100DC
C28	EC-378515J	C PP V F05 CSF3 513J 125DC
D1	✱ED-382668J	D SILICON PB-112F
D2	ED-348990	D SILICON H DS446
D3	ED-348990	D SILICON H DS446
D4	ED-348990	D SILICON H DS446
D5	ED-348990	D SILICON H DS446
D6	ED-348990	D SILICON H DS446
D7	ED-301911	D SILICON H DS448
D8	ED-301911	D SILICON H DS448
D9	ED-301911	D SILICON H DS448
D10	✱ED-379981J	D SILICON EG01LF-F4 F10 400/0.7A
D11	✱ED-379981J	D SILICON EG01LF-F4 F10 400/0.7A
D12	✱ED-379981J	D SILICON EG01LF-F4 F10 400/0.7A
D13	✱ED-379981J	D SILICON EG01LF-F4 F10 400/0.7A
D14	ED-356424	D LED BG5525S GREEN
D15	ED-356424	D LED BG5525S GREEN
D16	ED-377933	D ZENER H HZ27L 3 F10
D17	ED-377933	D ZENER H HZ27L 3 F10
D18	ED-377933	D ZENER H HZ27L 3 F10
D19	ED-377933	D ZENER H HZ27L 3 F10
D20	✱ED-379981J	D SILICON EG01LF-F4 F10 400/0.7A
D21	✱ED-379981J	D SILICON EG01LF-F4 F10 400/0.7A
D22	ED-356424	D LED BG5525S GREEN
D23	ED-356424	D LED BG5525S GREEN
D24	ED-381270J	D ZENER H HZ33L 1 F10
D25	ED-381270J	D ZENER H HZ33L 1 F10
D26	ED-381270J	D ZENER H HZ33L 1 F10
D27	ED-381270J	D ZENER H HZ33L 1 F10
D28	ED-379981J	D SILICON EG01LF-F4 F10 400/0.7A
D29	ED-379981J	D SILICON EG01LF-F4 F10 400/0.7A
D30	ED-356424	D LED BG5525S GREEN
D31	ED-356424	D LED BG5525S GREEN
D32	ED-346564	D ZENER H HZ15L 1
D33	ED-346564	D ZENER H HZ15L 1
D34	✱ED-379981J	D SILICON EG01LF-F4 F10 400/0.7A
D35	✱ED-379981J	D SILICON EG01LF-F4 F10 400/0.7A
D36	✱ED-379981J	D SILICON EG01LF-F4 F10 400/0.7A
D37	✱ED-379981J	D SILICON EG01LF-F4 F10 400/0.7A
D38	ED-382611J	D LED PY5504S YELLOW
D39	ED-382611J	D LED PY5504S YELLOW
D40	ED-351418	D ZENER H HZ7L B1
D41	ED-351418	D ZENER H HZ7L B1
D42	ED-346529	D ZENER H HZ6L C2
D43	ED-346560	D ZENER H HZ12L B3
D44	✱ED-379981J	D SILICON EG01LF-F4 F10 400/0.7A
D45	ED-379981J	D SILICON EG01LF-F4 F10 400/0.7A
D46	ED-301911	D SILICON H DS448
D47	ED-301911	D SILICON H DS448
IC1	EI-345474	IC HA12002
R1	ER-382671J	R CB H S10 FS RDS 1/4W 6R8J
R2	ER-382671J	R CB H S10 FS RDS 1/4W 6R8J
R3	ER-382671J	R CB H S10 FS RDS 1/4W 6R8J
R4	ER-382671J	R CB H S10 FS RDS 1/4W 6R8J
R5	ER-368226	R CT P R33+R33 5W
R6	ER-368226	R CT P R33+R33 5W
R15	ER-378502J	R CB H S10 FS RDS 1/4W 391J
R18	ER-381264J	R OMF H S20 FS 3W 332J
R22	ER-378499J	R CB H S10 FS RDS 1/4W 100J
R33	ER-382613J	R CB H S10 FS RDS 1/4W 331J
R34	ER-382613J	R CB H S10 FS RDS 1/4W 331J
R39	ER-382613J	R CB H S10 FS RDS 1/4W 331J
R40	ER-382613J	R CB H S10 FS RDS 1/4W 331J
R43	ER-324185	R CB H S10 FS RDS 1/4W 221J
R44	ER-324185	R CB H S10 FS RDS 1/4W 221J
R45	ER-378846J	R CB H S10 FS RDS 1/4W 102J
R49	ER-324185	R CB H S10 FS RDS 1/4W 221J
R50	ER-324185	R CB H S10 FS RDS 1/4W 221J
R51	ER-381265J	R OMF H S20 FS 3W 561J
R52	ER-381265J	R OMF H S20 FS 3W 561J
R54	ER-382614J	R CB H S10 FS RDS 1/4W 2R2J
R55	ER-382614J	R CB H S10 FS RDS 1/4W 2R2J
R56	ER-382614J	R CB H S10 FS RDS 1/4W 2R2J
R57	ER-382614J	R CB H S10 FS RDS 1/4W 2R2J
R58	ER-382614J	R CB H S10 FS RDS 1/4W 2R2J
R59	ER-382614J	R CB H S10 FS RDS 1/4W 2R2J
TR1	ET-349081	TR 2SC3383 S,T
TR3	ET-338244	TR 2SA1207 R,S
TR4	ET-360067	TR 2SC3330 T,U F05
TR5	ET-360067	TR 2SC3330 T,U F05
TR6	ET-338244	TR 2SA1207 R,S
TR7	ET-348830	TR 2SC2909 S,T
TR8	ET-338244	TR 2SA1207 R,S
TR9	ET-348830	TR 2SC2909 S,T
TR10	ET-352726	TR 2SA1392 T,U
TR11	ET-349081	TR 2SC3383 S,T
TR12	✱ET-338244	TR 2SA1207 R,S
TR13	✱ET-348830	TR 2SC2909 S,T
TR14	✱ET-359827	TR FET 2SK246 BL
TR15	✱ET-349459	TR 2SD1406 O,Y,GR
TR901	✱ET-345625	TR 2SC3116 S,T
TR902	✱ET-368760	TR 2SC3855 P,Y
TR903	✱ET-368760	TR 2SC3855 P,Y
TR904	✱ET-368758	TR 2SA1491 P,Y
F3A	✱EF-327103	FUSE TSC A 250V 500MA [U]
F3B	✱EF-309390	FUSE TSC 125V 500MA [C,A]
F3C	✱EF-623103	FUSE SEMKO T 250V 1.00A [E,V]
F3D	✱EF-355226	FUSE BET T 250V 1.00A [B]
F4A	✱EF-327103	FUSE TSC A 250V 500MA [U]
F4B	✱EF-309390	FUSE TSC 125V 500MA [C,A]
F4C	✱EF-623103	FUSE SEMKO T 250V 1.00A [E,V]
F4D	✱EF-355226	FUSE BET T 250V 1.00A [B]
F5A	✱EF-309388	FUSE TSC A 250V 800MA [U]
F5B	✱EF-309391	FUSE TSC 125V 800MA [C,A]
F5C	✱EF-623103	FUSE SEMKO T 250V 1.00A [E,V]
F5D	✱EF-355226	FUSE BET T 250V 1.00A [B]

4. SPEAKER TERMINAL P.C BOARD

Ref. No.	Part No.	Description
D101	ED-348990	D SILICON H DS446
D102	ED-348990	D SILICON H DS446
D103	ED-348990	D SILICON H DS446
D104	ED-348990	D SILICON H DS446
L101	EO-332116	COIL FIX 2 103AK-006A 2R2K
L102	EO-332116	COIL FIX 2 103AK-006A 2R2K [V]
L103	EO-332116	COIL FIX 2 103AK-006A 2R2K [V]
RL101	EQ-379982J	RELAY POW G5R-2282P 2NO 48V
RL102	EQ-379982J	RELAY POW G5R-2282P 2NO 48V
RL103	EQ-348929	RELAY SIG G5A-237P 2TR 12V
R101	ER-381266J	R OMF H S20 FS 3W 100J
R102	ER-381266J	R OMF H S20 FS 3W 100J
R103	ER-381265J	R OMF H S20 FS 3W 561J
TM901	EJ-379983J	TERMINAL W/SCREW YKD31-0338 8P [SPEAKER TERMINAL]

5. FUSE P.C BOARD

Ref. No.	Part No.	Description
L301	EO-332116	COIL FIX 2 103AK-006A 2R2K
F1A	✱EF-306952	FUSE TSC A 250V 4.00A [U]
F1B	✱EF-345658	FUSE TSC 125V 8.00A [C,A]
F1C	✱EF-690996	FUSE SEMKO T 250V 4.00A [E,V]
F1D	✱EF-359086	FUSE BET T 250V 4.00A [B]
F2	✱EF-306952	FUSE TSC A 250V 4.00A [U]

6. POWER SW P.C BOARD

Ref. No.	Part No.	Description
C401A	✱EC-320548	C CE V F 103Z 250AC [U]
C401B	✱EC-338496	C CE V FZ 472P 400AC [C,A,E,V,B]
SW1	✱ES-355407	SW PUSH ESB-99713V TV-8 [POWER SW]

7. INDICATOR P.C BOARD

Ref. No.	Part No.	Description
D501	ED-382620J	D LED PG5562X GREEN
D502	ED-382620J	D LED PG5562X GREEN
D503	ED-382620J	D LED PG5562X GREEN
D504	ED-382620J	D LED PG5562X GREEN

8. POWER LED P.C BOARD

Ref. No.	Part No.	Description
D601	ED-361885	D LED SLP-384C-51 GREEN
D602	ED-361885	D LED SLP-384C-51 GREEN

9. HEADPHONE P.C BOARD

Ref. No.	Part No.	Description
J701	EJ-369995	PHONE J 3P HLJ0540-410 GP 6.3 [PHONES]

10. REGULATOR P.C BOARD

Ref. No.	Part No.	Description
TR801	✱ET-368759	TR 2SC3854 P,Y
TR802	✱ET-368757	TR 2SA1490 P,Y
TR803	✱ET-345625	TR 2SC3116 S,T
TR804	✱ET-345626	TR 2SA1248 S,T
TR805	✱ET-345625	TR 2SC3116 S,T
TR806	✱ET-345626	TR 2SA1248 S,T
TR807	✱ET-345625	TR 2SC3116 S,T
TR808	✱ET-345626	TR 2SA1248 S,T
TR809	✱ET-345625	TR 2SC3116 S,T

11. V-AMP P.C BOARD

Ref. No.	Part No.	Description
IC1	EI-362588	IC M5238P
J1	EJ-336904	PIN J AJC-036-ACB P 6P
J2	EJ-336904	PIN J AJC-036-ACB P 6P
R5	ER-338000	R FUSE H S10 ERD2FC 1/4W 2200G
R13	ER-338000	R FUSE H S10 ERD2FC 1/4W 2200G
R27	ER-378498J	R CB H S10 FS RDS 1/4W 682J
R28	ER-378498J	R CB H S10 FS RDS 1/4W 682J
R30	ER-372991	R CB H S10 FS RDS 1/4W 101J
R33	ER-372991	R CB H S10 FS RDS 1/4W 101J
R36	ER-378499J	R CB H S10 FS RDS 1/4W 100J
R37	ER-378499J	R CB H S10 FS RDS 1/4W 100J
R45	ER-382603J	R CB H S10 FS RDS 1/4W 471J
R46	ER-382603J	R CB H S10 FS RDS 1/4W 471J
R47	ER-382603J	R CB H S10 FS RDS 1/4W 471J
TR1	ET-354897	TR FET 2SK170 BL,GR,V
TR2	ET-357162	TR FET 2SJ74 GR,BL,V
TR3	ET-370038	TR 2SC2910 S,T
TR4	ET-345460	TR 2SA1208 R,S,T
TR5	ET-338244	TR 2SA1207 R,S
TR6	ET-348830	TR 2SC2909 S,T
TR7	ET-348830	TR 2SC2909 S,T
TR8	ET-348830	TR 2SC2909 S,T
TR9	ET-338244	TR 2SA1207 R,S
TR10	ET-348830	TR 2SC2909 S,T
TR11	ET-348829	TR 2SA1209 S,T
TR12	ET-348831	TR 2SC2911 S,T
TR13	ET-348831	TR 2SC2911 S,T
TR14	ET-348829	TR 2SA1209 S,T
TR15	ET-348831	TR 2SC2911 S,T
TR16	ET-348829	TR 2SA1209 S,T
VR1	EV-371308	R S-FIX V VM6CK(PH) 0.30W 201

12. EQUALIZER P.C BOARD

Ref. No.	Part No.	Description
D101	ED-356424	D LED BG5525S GREEN
D102	ED-343410	D ZENER H HZ6L A1
D103	ED-343410	D ZENER H HZ6L A1
J101	EJ-336904	PIN J AJC-036-ACB P 6P
J102	EJ-336904	PIN J AJC-036-ACB P 6P
R127	ER-382604J	R CB H S10 FS RDS 1/4W 390J
R128	ER-382604J	R CB H S10 FS RDS 1/4W 390J
TR101	ET-354897	TR FET 2SK170 BL,GR,V
TR102	ET-357162	TR FET 2SJ74 GR,BL,V
TR103	ET-352726	TR 2SA1392 T,U
TR104	ET-349081	TR 2SC3383 S,T
TR105	ET-349081	TR 2SC3383 S,T
TR106	ET-352726	TR 2SA1392 T,U
VR101	EV-360948	R S-FIX V RVF8W01 0/10W 104

13. TR P.C BOARD

Ref. No.	Part No.	Description
D201	ED-301911	D SILICON H DS448
TR905	ET-368758	TR 2SA1491 P,Y
VR201	EV-346380	R S-FIX H RH1051C 0.15W 332

14. INPUT P.C BOARD

Ref. No.	Part No.	Description
D1	ED-343410	D ZENER H HZ6L A1
SW301	ES-379986J	SW ROTARY SRRZS6 2-06-06N [INPUT SELECTOR]
SW302	EV-379987J	SW ROTARY SRRZS6 2-06-03N [TAPE SELECTOR]
SW303	ES-379988J	SW ROTARY SRRZS8 2-08-03N [DIRECT OPERATION]
SW304	ES-379984J	SW ROTARY SRRZS4 2-04-04N [DIGITAL INPUT]
TR1	ET-360646	TR DTA143ES
TR2	ET-360646	TR DTA143ES
TR3	ET-360646	TR DTA143ES
VR1	EV-379989J	VR ROTARY RK16314A0 A104X4 [MAIN VOLUME]

15. TONE CONTROL P.C BOARD

Ref. No.	Part No.	Description
IC1	EI-344764	IC M5218P-21
SW1	ES-379984J	SW ROTARY SRRZS4 2-04-04N [SPEAKER SELECTOR]
VR1	EV-379992J	VR ROTARY RK1631210 C104X2 [BASS CONTROL]
VR2	EV-379993J	VR ROTARY RK1631210 C104X2 [TREBLE CONTROL]

16. REC SELECTOR P.C BOARD

Ref. No.	Part No.	Description
D1	ED-301911	D SILICON H DS448
SW1	ES-379986J	SW ROTARY SRRZS6 2-06-06N [REC SELECTOR]
SW2	ES-379988J	SW ROTARY SRRZS8 2-08-03N [TAPE SELECTOR]
SW3	ES-378941J	SW PUSH SPUL12 2-04-02S [MUTE]
VR1	EV-379994J	VR ROTARY RK1631110 SPL W104 [BALANCE]

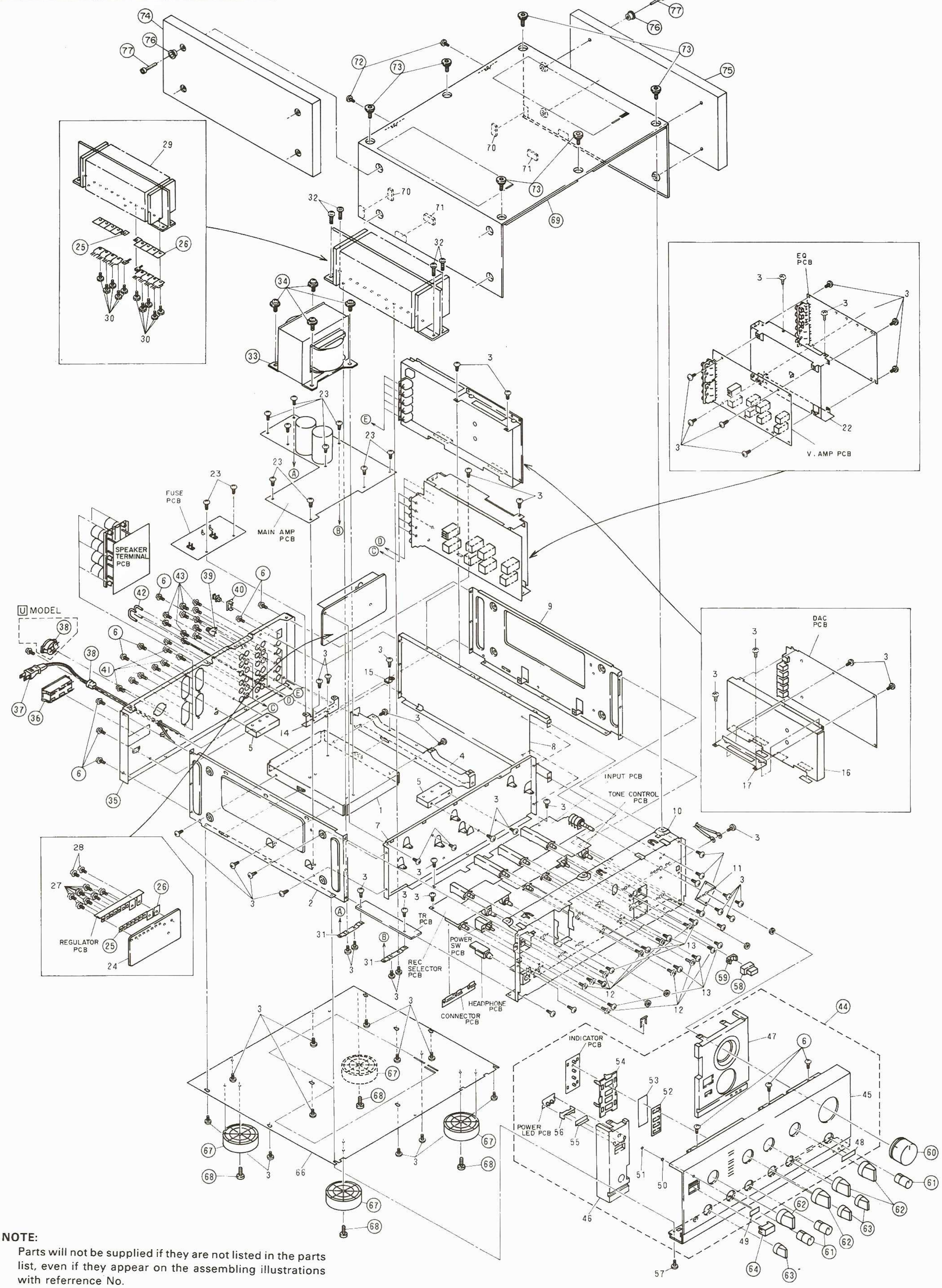
17. DAC P.C BOARD

Ref. No.	Part No.	Description
C29	EC-380325J	C PP V MKP1841 104J 250DC
D1	ED-301911	D SILICON H DS448
D2	ED-301911	D SILICON H DS448
D3	ED-301911	D SILICON H DS448
D4	ED-301911	D SILICON H DS448
D5	ED-301911	D SILICON H DS448
FL1	EO-378920J	COIL VARI 1 25-5721-13
IC2	EI-360039	IC TC74HC08P
IC3	EI-360040	IC TC74HCU04P
IC4	EI-378921J	IC TC74HC151P
IC5	EI-360037	IC TC74HC00P
IC6	EI-360040	IC TC74HCU04P
IC7	EI-375346	IC MM74HCO4N
IC8	EI-360037	IC TC74HC00P
IC9	EI-379997J	IC YM3623B
IC10	EI-381282J	IC CXD-1162P
IC11	EI-356049	IC TC74HC139P
IC12	EI-368612	IC PCM56P
IC13	EI-377191	IC NJM5532D-D
J1	EJ-377170	PIN J YKB11-0473 GP ORANGE 1P [DIGITAL 1 IN]
J2	EJ-377170	PIN J YKB11-0473 GP ORANGE 1P [DIGITAL 2 IN]
J3	EJ-377170	PIN J YKB11-0473 GP ORANGE 1P [DIGITAL 3 IN]
J4	EJ-377170	PIN J YKB11-0473 GP ORANGE 1P [DIGITAL 2 OUT]
J5	EJ-377170	PIN J YKB11-0473 GP ORANGE 1P [DIGITAL 3 OUT]
J11	EJ-368258	SOCKET OPTICAL TORX172 [OPTICAL IN]
L1	EO-343816	COIL FIX 1 LAL04 681K
TR1	ET-354371	TR DTC124ES
TR2	ET-352726	TR 2SA1392 T,U
TR3	ET-354371	TR DTC124ES
TR4	ET-352726	TR 2SA1392 T,U
TR5	ET-349081	TR 2SC3383 S,T
TR6	ET-349081	TR 2SC3383 S,T
TR7	ET-360646	TR DTA143ES
T1	BT-368261	TRANS PULSE TC-1027-04
T2	BT-368261	TRANS PULSE TC-1027-04
VR1	EV-337996	R S-FIX H RVF8P01 0.10W 104
X1	EI-374176	OSC X'TAL AT-51 16.9344MHZ

18. FINAL ASSEMBLY BLOCK

Ref. No.	Part No.	Description
6	ZS-308846	T2BR30X08STL BZN PROJECTION
25	EZ-200473	SILICON RUBBER SHEET TC-30
26	EZ-345459	TRANSISTOR SUPPORT BFG-20T0-3P
33A	∗BT-379958J	TRANS POW A2057(U) [U]
33B	∗BT-379961J	TRANS POW A2057(C,A) [C,A]
33C	∗BT-379962J1	TRANS POW A2057(EV) [E,V]
33D	∗BT-379963J1	TRANS POW A2057(B) [B]
34	ZS-365373	ST BID40X10STL CMT CUP
35A	SP-379908J	PANEL REAR AM-73(U) [U]
35B	SP-379909J	PANEL REAR AM-73(A,C) [C,A]
35C	SP-379910J	PANEL REAR AM-73(E,V) [E,V]
35D	SP-379911J	PANEL REAR AM-73(B) [B]
36A	∗EJ-337405	SOCKET OUT S2T733T164 JUC 3X2P [U]
36B	∗EJ-352642	SOCKET OUTLET S2T733T114T [C,A]
37A	∗EW-363658	AC CORD 200 0129AVFF B100 A U/ [U]
37B	∗EW-363646	AC CORD 200 238APSPT2 B100 A U [C,A]
37C	∗EW-363671	AC CORD 200 0364 LCFL B100 A E [E,V]
37D	∗EW-363683	AC CORD 200 LCFL B100 A B [B]
38	∗ES-349070	SW SELECTOR YKS11-0002 02-4 [U]
39	EJ-329610	TERMINAL W/SCREW UB-0067 L 1P
40	SE-375348	ESCUTCHEON
41	ZS-362151	PT BR30X12STL BNI
42	EJ-348218	PLUG SHORT PIN P2138
43	ZS-351886	PT BR30X10STL BNI
44	BD-A2057A060A	PANEL FRONT BLK AM-73-B
58	SK-379900J	KNOB MUTE
59	ZW-368205	FLEXIBLE RING 2414-0-0-086-01
60	SK-379887J	KNOB VR B PART
61	SK-379898J	KNOB BALANCE PART
62	SK-379893J	KNOB SELECTOR PART
63	SK-379896J	KNOB SP PART
64	SK-373236B	KNOB POWER-B
67	SA-B368687	FOOT ROUND SHAPED PART
68	ZS-304021	ST BID40X12STL CMT
69	SP-379905J	CAVER UPPER(2) B
72	ZS-308846	T2BR30X08STL BZN PROJECTION
73	ZS-381482J	SCREW TOP COVER(3) B OM
74	SP-381364J	SIDE BOARD(L)
75	SP-381365J	SIDE BOARD(R)
76	ZW-376292	WASHER SIDE BOARD

FINAL ASSEMBLY BLOCK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NOTE:
Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with referrence No.

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Part No.	Ref. No.
BA-A2057A020A	2-1A
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ED-346560	3-D43
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ED-346564	3-D32
ED-346564	3-D33
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ED-348990	3-D3
ED-348990	3-D4
ED-348990	3-D5
ED-348990	3-D6
ED-348990	4-D101
ED-348990	4-D102
ED-348990	4-D103
ED-348990	4-D104
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ED-351418	3-D41
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ED-356424	3-D14
ED-356424	3-D15
ED-356424	3-D22
ED-356424	3-D23
ED-356424	3-D30
ED-356424	3-D31
ED-356424	12-D101
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ED-361885	8-D601
ED-361885	8-D602
ED-377933	1-12
ED-377933	3-D16
ED-377933	3-D17
ED-377933	3-D18
ED-377933	3-D19
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ED-379981J	3-D10
ED-379981J	3-D11
ED-379981J	3-D12
ED-379981J	3-D13
ED-379981J	3-D20
ED-379981J	3-D21
ED-379981J	3-D28
ED-379981J	3-D29
ED-379981J	3-D34
ED-379981J	3-D35
ED-379981J	3-D36
ED-379981J	3-D37
ED-379981J	3-D44
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ER-324185	3-R49
ER-324185	3-R50
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ER-378499J	11-R36
ER-378499J	11-R37
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ER-381264J	3-R18
ER-381265J	3-R51
ER-381265J	3-R52
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ER-382614J	3-R55
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ET-338244	3-TR6
ET-338244	3-TR8
ET-338244	3-TR12
ET-338244	11-TR5
ET-338244	11-TR9
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ET-345626	10-TR808
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ET-348829	11-TR11
ET-348829	11-TR14
ET-348829	11-TR16
ET-348830	1-62
ET-348830	3-TR7
ET-348830	3-TR9
ET-348830	3-TR13
ET-348830	11-TR6
ET-348830	11-TR7
ET-348830	11-TR8
ET-348830	11-TR10
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ET-349081	3-TR11
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ET-349081	12-TR105
ET-349081	17-TR5
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ET-352726	3-TR10
ET-352726	12-TR103
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ABBREVIATIONS (AMPLIFIER)

ABBREVIATIONS	EXPLANATION
A	Analog
AC	Alternating Current
AMP	AMPlifier
CD	Compact Disc
COM	COMmon
D	Digital
D/A	Digital to Analog
DAC	Digital to Analog Converter
DAT	Digital Audio Tape recorder
DC	Direct Current
GND	GrouND
L	Left
LED	Light Emitting Diode
MC	Moving Coil
MM	Moving Magnet
PCB	Printed Circuit Board
R	Right
REG.	REGulator
REC	RECord
TR	TRansistor
SW	SWitch
V.AMP	Voltage AMPlifier
V.DISC	Video DISC
VR	Variable Resistance
VTR	Video Tape Recorder

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MODEL AM-73

SCHEMATIC DIAGRAM AND PC BOARDS

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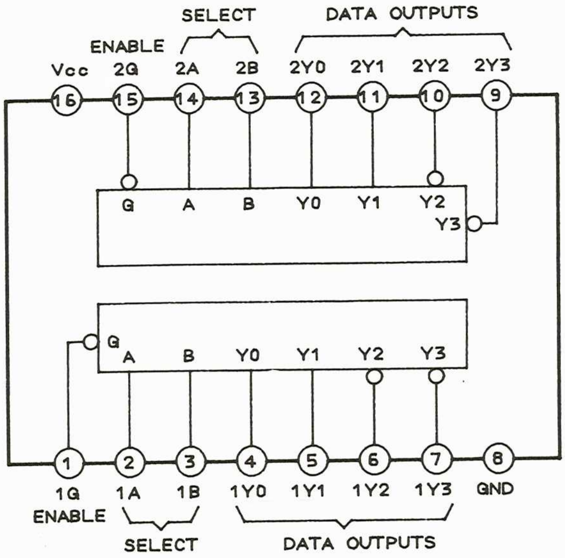
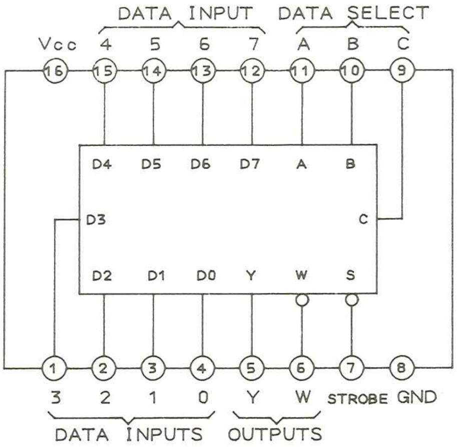
74HC139 (Dual 2 to 4 Demultiplexers)


SELECT
DATA OUTPUTS
ENABLE
Vcc
2G
2A
2B
2Y0
2Y1
2Y2
2Y3
16
15
14
13
12
11
10
9
G
A
B
Y0
Y1
Y2
Y3
G
A
B
Y0
Y1
Y2
Y3
1
2
3
4
5
6
7
8
1G
1A
1B
1Y0
1Y1
1Y2
1Y3
GND
ENABLE
SELECT
DATA OUTPUTS

Function Table

INPUTS			OUTPUTS			
ENABLE	SELECT					
G	B	A	Y0	Y1	Y2	Y3
H	X	X	H	H	H	H
L	L	L	L	H	H	H
L	L	H	H	L	H	H
L	H	L	H	H	L	H
L	H	H	H	H	H	L

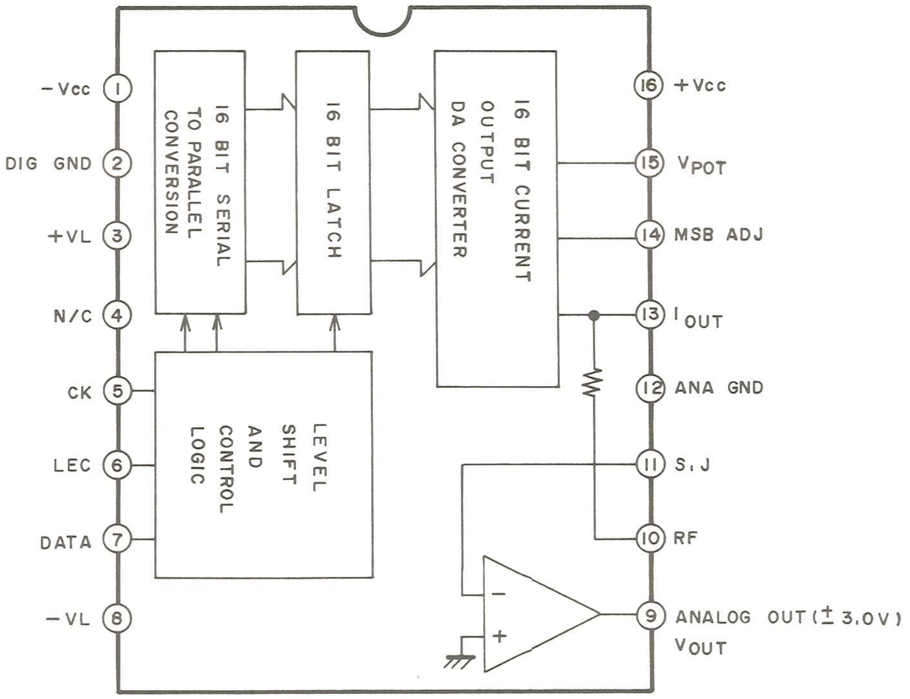
74HC151P (8 to 1 Data Selector)


DATA INPUT
DATA SELECT
Vcc
4
5
6
7
A
B
C
16
15
14
13
12
11
10
9
D4
D5
D6
D7
A
B
D3
C
D2
D1
D0
Y
W
S
1
2
3
4
5
6
7
8
3
2
1
0
Y
W
STROBE
GND
DATA INPUTS
OUTPUTS

Function Table

INPUTS				OUTPUTS	
SELECT			STROBE	Y	W
C	B	A	S		
X	X	X	H	L	H
L	L	L	L	D0	$\overline{D0}$
L	L	H	L	D1	$\overline{D1}$
L	H	L	L	D2	$\overline{D2}$
L	H	H	L	D3	$\overline{D3}$
H	L	L	L	D4	$\overline{D4}$
H	L	H	L	D5	$\overline{D5}$
H	H	L	L	D6	$\overline{D6}$
H	H	H	L	D7	$\overline{D7}$

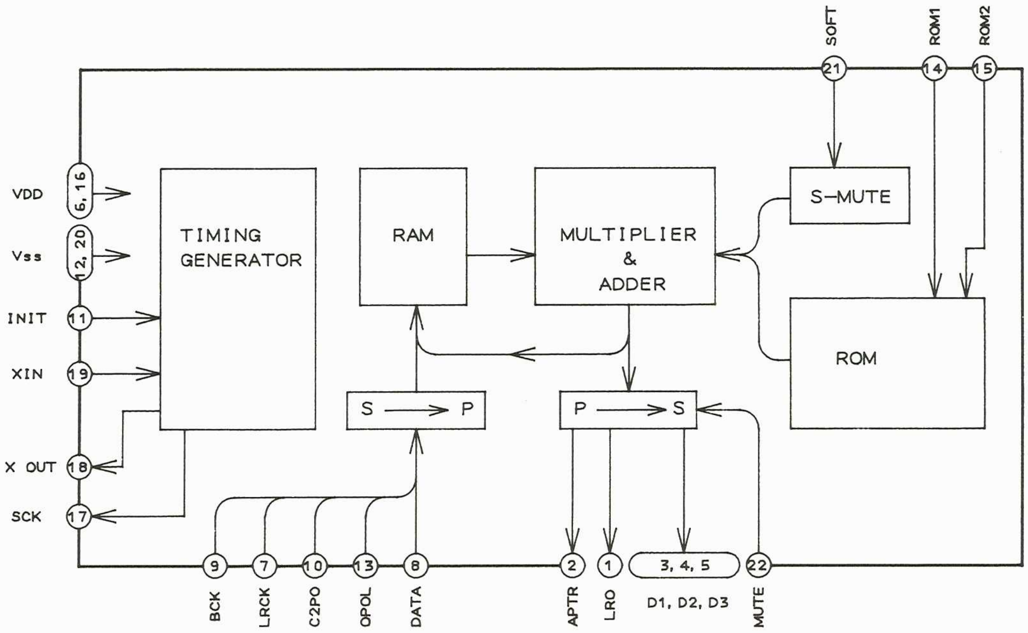
PCM56P (D/A Convertor)


−Vcc 1
DIG GND 2
+VL 3
N/C 4
CK 5
LEC 6
DATA 7
−VL 8
16 +Vcc
15 VPOT
14 MSB ADJ
13 IOUT
12 ANA GND
11 S.J
10 RF
9 ANALOG OUT (± 3.0V)
VOUT
16 BIT SERIAL TO PARALLEL CONVERSION
16 BIT LATCH
16 BIT CURRENT OUTPUT DA CONVERTER
LEVEL SHIFT AND CONTROL LOGIC
−
+

PIN NO.	SYMBOL	DESCRIPTION
1	−Vcc	Analog + power supply
2	DIG GND	Digital ground
3	+V1	Logic + power supply
4	N.C	
5	CK	Clock input
6	LEC	Latch enable control
7	DATA	Data input
8	−V1	Logic − power supply
9	Vout	Voltage output
10	RF	Terminal for feedback resistor
11	SJ	Summing junction (OP Amp input)
12	ANA GND	Analog ground
13	Iout	Current output
14	MSB ADJ	Terminal for MSB adjustment
15	Vpot	Terminal for potentiometer
16	+Vcc	Analog + power supply

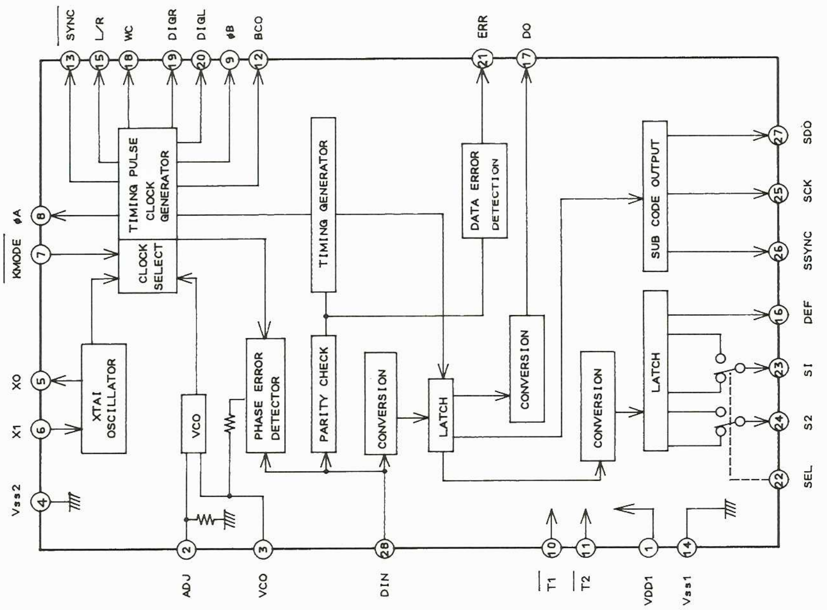
(PU): Terminal pull upped inside of IC

CXD1162P (4fs Over Sampling Digital Filter)

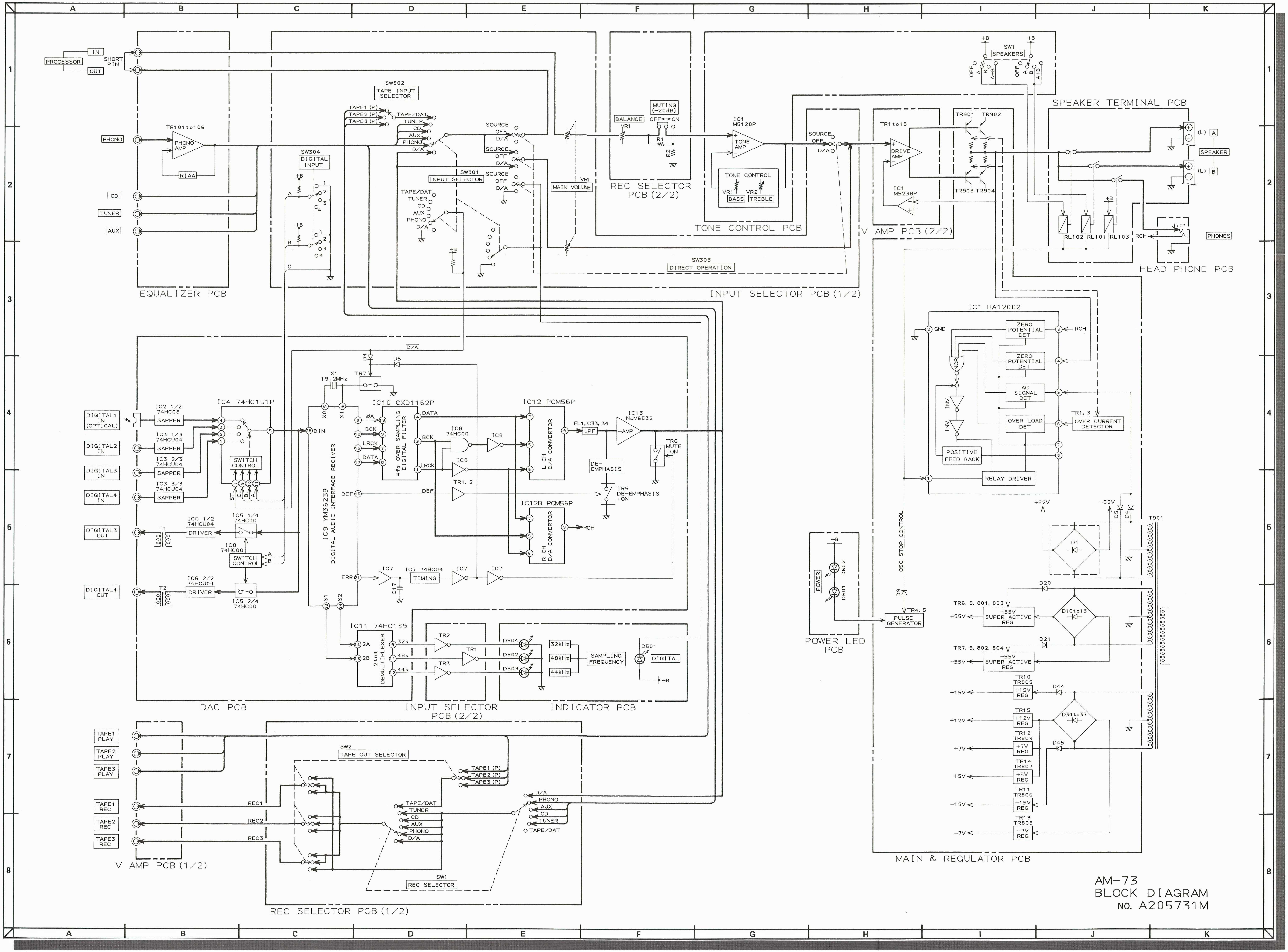

SOFT
ROM1
ROM2
21
14
15
VDD
6, 16
Vss
12, 20
INIT
11
XIN
19
X OUT
18
SCK
17
TIMING GENERATOR
RAM
MULTIPLIER & ADDER
S-MUTE
ROM
S → P
P → S
9
7
10
13
8
2
1
3, 4, 5
22
BCK
LRCK
C2PO
DPOL
DATA
APTR
LRO
D1, D2, D3
MUTE

PIN NO.	SYMBOL	I/O	DESCRIPTION OF TERMINAL
1	LRO	O	LRCK Output
2	APTR	O	Aperture Clock for R Channel
3	D1	O	BCK Output
4	D2	O	DATA Output
5	D3	O	WCK Output
6	VDD	—	+B (+5V)
7	LRCK	I	LRCK Input
8	DATA	I	16 bit x 2 Serial DATA Input
9	BCK	I	BCK Input
10	C2PO	I	Error Flag Input
11	$\overline{\text{INIT}}$	I	Power “ON” Reset Input
12	Vss	—	−B (0V)
13	DPOL	I	
14	ROM1	I	ROM Select for 83rd Order
15	ROM2	I	ROM Select for 21st Order
16	VDD	—	+B (+5V)
17	SCK	O	System Clock Output for External IC (384fs)
18	XOUT	O	X’tal OSC Output (384fs)
19	XIN	I	X’tal OSC Input (384fs)
20	Vss	—	−B (0V)
21	SOFT	I	Soft Muting ON/$\overline{\text{OFF}}$ Select
22	MUTE		Set the Output to “0” or OFF-SET

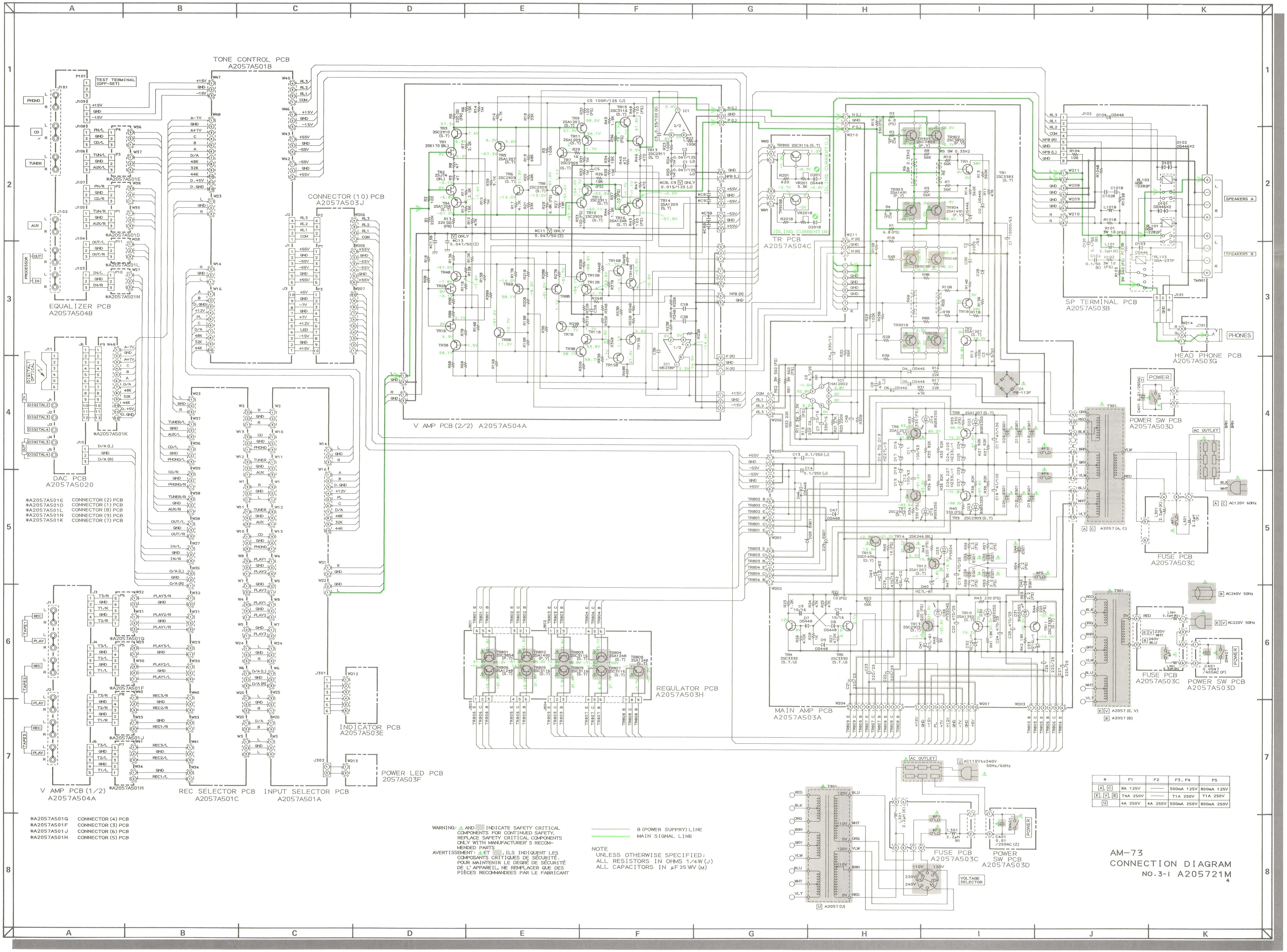
YM3623 (Digital Audio Interface Reciver)


SYNC
L/R
WC
DIGR
DIGL
φB
BCO
ERR
DO
13
15
18
19
20
9
12
21
17
TIMING PULSE CLOCK GENERATOR
CLOCK SELECT
TIMING GENERATOR
DATA ERROR DETECTION
SUB CODE OUTPUT
27 SDO
25 SCK
26 SSYNC
16 DEF
23 S1
24 S2
22 SEL
8 φA
7 KMODE
5 XO
6 X1
4 Vss2
XTAI OSCILLATOR
VCO
PHASE ERROR DETECTOR
PARITY CHECK
CONVERSION
LATCH
CONVERSION
CONVERSION
LATCH
2 ADJ
3 VCO
28 DIN
10 T1
11 T2
1 VDD1
14 Vss1

<table>
<tr><th>PIN NO.</th><th>SYMBOL</th><th>I/O</th><th>DESCRIPTION OF TERMINAL</th></tr>
<tr><td>1</td><td>VDD1</td><td></td><td>+B (+5V) for System Section</td></tr>
<tr><td>2</td><td>ADJ</td><td>I</td><td>No Connection</td></tr>
<tr><td>3</td><td>VCO</td><td>I/O</td><td>External Capaciter Connection Terminal for VCO</td></tr>
<tr><td>4</td><td>VSS2</td><td></td><td>GND for VCO Circuit</td></tr>
<tr><td>5</td><td>XO</td><td>O</td><td rowspan="2">} X'tal Oscillator</td></tr>
<tr><td>6</td><td>XI</td><td>I</td></tr>
<tr><td>7</td><td>K̄ MODE</td><td>I(P)</td><td>H: When Data Input into DIN Terminal, Clock Signal Abstracted from Input Data by PLL Circuit, If No Data Input Data into DIN Clock Signal Use from X'tal OSC.
L: Always Use X'tal Oscillation</td></tr>
<tr><td>8</td><td>φA</td><td>O</td><td>● When Using X'tal OSC = 16.934 MHz
● When Operating PLL Circuit = Changing the Frequency According to Input Data of DIN. (About 16.934 MHz at fs = 44.1 kHz)</td></tr>
<tr><td>9</td><td>φB</td><td>O</td><td>● When Using X'tal OSC = φA/3
● When Operating PLL Circuit = Changing the Frequency According to Input Data. (About 5.6448 MHz at fs = 44.1 kHz)</td></tr>
<tr><td>10</td><td>T̄1</td><td>I(P)</td><td rowspan="2">} For Check of Internal Circuit</td></tr>
<tr><td>11</td><td>T̄2</td><td>I(P)</td></tr>
<tr><td>12</td><td>BCO</td><td>O</td><td>Timing Clock for the Output Signal from DO</td></tr>
<tr><td>13</td><td>S̄ȲN̄C̄</td><td>O</td><td>SYNCHRONOUS Signal Output</td></tr>
<tr><td>14</td><td>VSS1</td><td>O</td><td>GND of System Section</td></tr>
<tr><td>15</td><td>L/R̄</td><td>O</td><td>Data Output Select from DO (H = L ch., L = R ch.)</td></tr>
<tr><td>16</td><td>DEF</td><td>O</td><td>H = DE-EMPHASIS "ON", L = DE-EMPHASIS "OFF"</td></tr>
<tr><td>17</td><td>DO</td><td>O</td><td>16 Bit Data Output</td></tr>
<tr><td>18</td><td>WC</td><td>O</td><td>When Data is Output to DO = H</td></tr>
<tr><td>19</td><td>DIGR</td><td>O</td><td>Signal Output for R ch. Deglitch</td></tr>
<tr><td>20</td><td>DIGL</td><td>O</td><td>Signal Output for L ch. Deglitch</td></tr>
<tr><td>21</td><td>ERR</td><td>O</td><td>H = Parity Error, L = NO ERROR</td></tr>
<tr><td>22</td><td>SEL</td><td>I(P)</td><td>Function Select Signal of S1 and S2</td></tr>
<tr><td>23</td><td>S1</td><td rowspan="2">O</td><td rowspan="2">
<table>
<tr><td>SEL = L
(COPY)</td><td>
<table>
<tr><th></th><th>NO</th><th>YES</th></tr>
<tr><td>S1</td><td>L</td><td>H</td></tr>
<tr><td>S2</td><td>L</td><td>H</td></tr>
</table>
</td><td>SEL = H
(Sampling frequency)</td><td>
<table>
<tr><th></th><th>44.1 kHz</th><th>48 kHz</th><th>32 kHz</th></tr>
<tr><td>S1</td><td>L</td><td>L</td><td>H</td></tr>
<tr><td>S2</td><td>L</td><td>H</td><td>H</td></tr>
</table>
</td></tr>
</table>
</td></tr>
<tr><td>24</td><td>S2</td></tr>
<tr><td>25</td><td>SCK</td><td>O</td><td>Clock Signal for Sub Code</td></tr>
<tr><td>26</td><td>SSYNC</td><td>O</td><td>SYNC Signal for Sub Code</td></tr>
<tr><td>27</td><td>SDO</td><td>O</td><td>Sub Code Data Output</td></tr>
<tr><td>28</td><td>DIN</td><td>I</td><td>Data Input</td></tr>
</table>


PROCESSOR
IN
OUT
SHORT PIN
PHONO
TR101 to 106
PHONO AMP
RIAA
CD
TUNER
AUX
EQUALIZER PCB
SW302
TAPE INPUT SELECTOR
TAPE1 (P)
TAPE2 (P)
TAPE3 (P)
TAPE/DAT
TUNER
CD
AUX
PHONO
D/A
SW304
DIGITAL INPUT
SW301
INPUT SELECTOR
SOURCE
OFF
D/A
VR1
MAIN VOLUME
BALANCE
MUTING (−20dB)
OFF ON
R1
R2
REC SELECTOR PCB (2/2)
IC1 M5128P
TONE AMP
TONE CONTROL
VR1 BASS
VR2 TREBLE
TONE CONTROL PCB
TR1 to 15
DRIVE AMP
IC1 M5238P
V AMP PCB (2/2)
TR901 TR902
TR903 TR904
SW1 SPEAKERS
OFF A B A+B
SPEAKER TERMINAL PCB
(L) A
(L) B
SPEAKER
RL102 RL101 RL103
RCH
J701
PHONES
HEAD PHONE PCB
SW303
DIRECT OPERATION
INPUT SELECTOR PCB (1/2)
DIGITAL1 IN (OPTICAL)
DIGITAL2 IN
DIGITAL3 IN
DIGITAL4 IN
DIGITAL3 OUT
DIGITAL4 OUT
IC2 1/2 74HC08
IC3 1/3 74HCU04
IC3 2/3 74HCU04
IC3 3/3 74HCU04
SAPPER
IC4 74HC151P
SWITCH CONTROL
IC6 1/2 74HCU04
IC6 2/2 74HCU04
DRIVER
IC5 1/4 74HC00
IC5 2/4 74HC00
IC8 74HC00
T1
T2
D/A
D4
D5
X1 19.2MHz
TR7
IC10 CXD1162P
4fs OVER SAMPLING DIGITAL FILTER
ØA
BCK
LRCK
DATA
IC9 YM3623B DIGITAL AUDIO INTERFACE RECIVER
DIN
DEF
ERR
S1
S2
IC8 74HC00
IC8
TR1, 2
IC12 PCM56P
L CH D/A CONVERTOR
IC12B PCM56P
R CH D/A CONVERTOR
RCH
FL1, C33, 34
LPF
IC13 NJM6532
+AMP
TR6 MUTE : ON
DE-EMPHASIS
TR5 DE-EMPHASIS : ON
IC7
IC7 74HC04
TIMING
C17
IC11 74HC139
2 to 4 DEMULTIPLEXER
2A
2B
32k
48k
44k
TR2
TR1
TR3
D504
D502
D503
32kHz
48kHz
44kHz
SAMPLING FREQUENCY
D501
DIGITAL
+B
DAC PCB
INPUT SELECTOR PCB (2/2)
INDICATOR PCB
TAPE1 PLAY
TAPE2 PLAY
TAPE3 PLAY
TAPE1 REC
TAPE2 REC
TAPE3 REC
REC1
REC2
REC3
V AMP PCB (1/2)
SW2
TAPE OUT SELECTOR
SW1
REC SELECTOR
REC SELECTOR PCB (1/2)
IC1 HA12002
GND
ZERO POTENTIAL DET
AC SIGNAL DET
OVER LOAD DET
INV
NOR
POSITIVE FEED BACK
RELAY DRIVER
TR1, 3
OVER CURRENT DETECTOR
OSC STOP CONTROL
D9
TR4, 5
PULSE GENERATOR
POWER
D602
D601
POWER LED PCB
+52V
−52V
D1
D5
D4
T901
D20
TR6, 8, 801, 803
+55V
+55V SUPER ACTIVE REG
D10 to 13
D21
TR7, 9, 802, 804
−55V
−55V SUPER ACTIVE REG
TR10 TR805
+15V
+15V REG
D44
TR15
+12V
+12V REG
D34 to 37
TR12 TR809
+7V
+7V REG
D45
TR14 TR807
+5V
+5V REG
TR11 TR806
−15V
−15V REG
TR13 TR808
−7V
−7V REG
MAIN & REGULATOR PCB
A B C D E F G H I J K
1 2 3 4 5 6 7 8

AM−73
BLOCK DIAGRAM
NO. A205731M


TONE CONTROL PCB
A2057A501B
EQUALIZER PCB
A2057A504B
DAC PCB
A2057A5020
CONNECTOR (10) PCB
A2057A503J
V AMP PCB (2/2) A2057A504A
V AMP PCB (1/2)
A2057A504A
REC SELECTOR PCB
A2057A501C
INPUT SELECTOR PCB
A2057A501A
INDICATOR PCB
A2057A503E
POWER LED PCB
2057A503F
REGULATOR PCB
A2057A503H
MAIN AMP PCB
A2057A503A
TR PCB
A2057A504C
SP TERMINAL PCB
A2057A503B
HEAD PHONE PCB
A2057A503G
POWER SW PCB
A2057A503D
FUSE PCB
A2057A503C
AC OUTLET
VOLTAGE SELECTOR
*A2057A501E CONNECTOR (2) PCB
*A2057A501D CONNECTOR (1) PCB
*A2057A501L CONNECTOR (8) PCB
*A2057A501N CONNECTOR (9) PCB
*A2057A501K CONNECTOR (7) PCB
*A2057A501G CONNECTOR (4) PCB
*A2057A501F CONNECTOR (3) PCB
*A2057A501J CONNECTOR (6) PCB
*A2057A501H CONNECTOR (5) PCB
PHONO
CD
TUNER
AUX
PROCESSOR
TAPE1
TAPE2
TAPE3
REC
PLAY
SPEAKERS A
SPEAKERS B
PHONES
POWER
IDLING CURRENT (L)
IDLING CURRENT (R)
A C AC120V 60Hz
B AC240V 50Hz
E V AC220V 50Hz
U AC110V to 240V 50Hz/60Hz
A2057 (A, C)
A2057 (E, V)
A2057 (B)
A2057 (U)

WARNING: ⚠ AND ▨ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠ ET ▨, ILS INDIQUENT LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

B (POWER SUPPRY) LINE

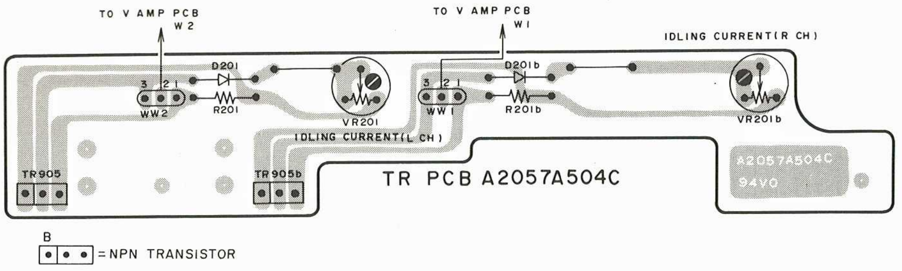
MAIN SIGNAL LINE

NOTE

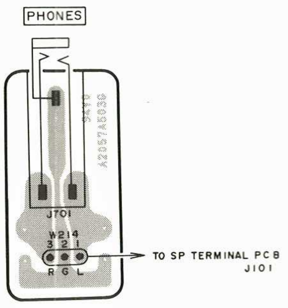
UNLESS OTHERWISE SPECIFIED;
ALL RESISTORS IN OHMS 1/4W (J)
ALL CAPACITORS IN μF 25WV (M)

*	F1	F2	F3, F4	F5
A, C	8A 125V	—	500mA 125V	800mA 125V
E, V, B	T4A 250V	—	T1A 250V	T1A 250V
U	4A 250V	4A 250V	500mA 250V	800mA 250V

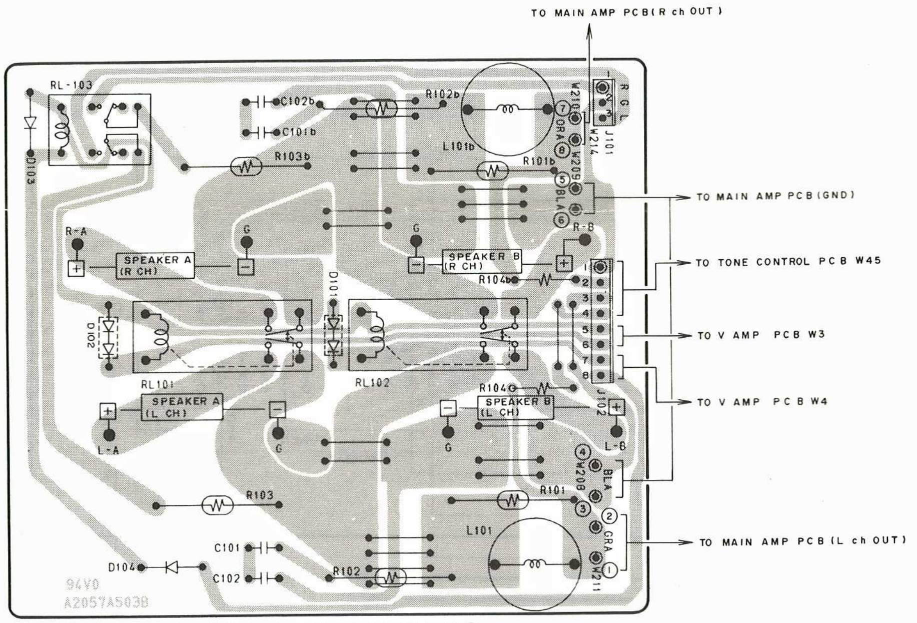
AM-73
CONNECTION DIAGRAM
NO.3-1 A205721M


TO V AMP PCB W2
TO V AMP PCB W1
IDLING CURRENT(R CH)
D201
R201
VR201
WW2
D201b
R201b
WW1
VR201b
IDLING CURRENT(L CH)
TR905
TR905b
A2057A504C
94V0
B
= NPN TRANSISTOR

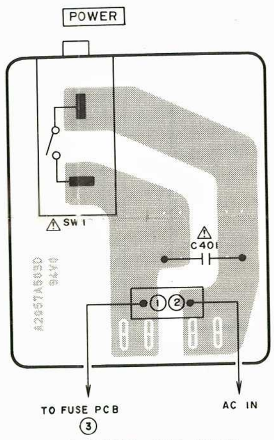
TR PCB A2057A504C


PHONES
J701
W214
R G L
TO SP TERMINAL PCB J101
A2057A503G
94V0

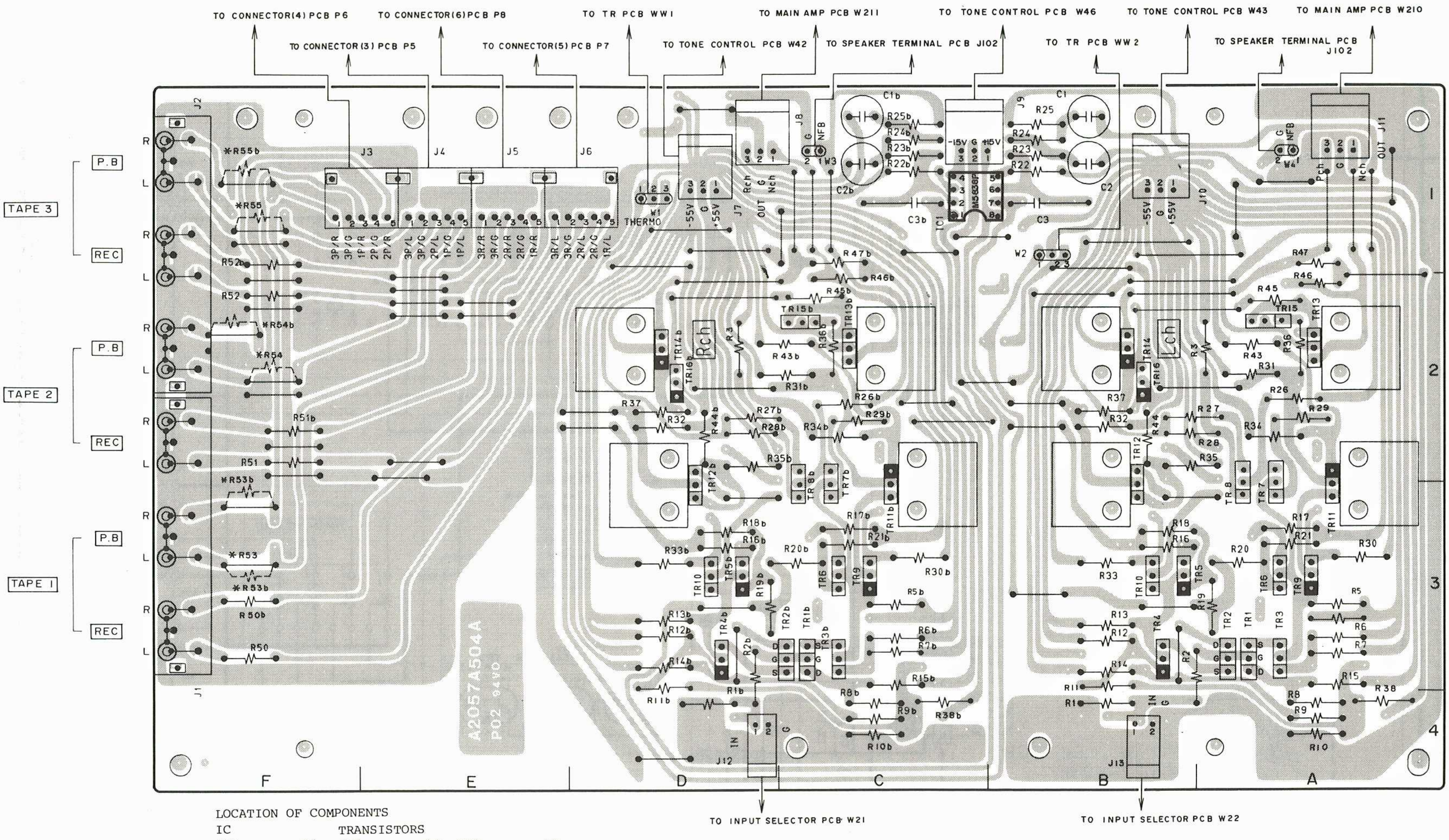
HEAD PHONE PCB
A2057A503G


TO MAIN AMP PCB(R ch OUT)
RL-103
D103
C102b
C101b
R102b
R103b
L101b
R101b
W210
W214
J101
R G L
ORA
BLA
W209
R-A
R-B
SPEAKER A (R CH)
SPEAKER B (R CH)
G
R104b
D101
D102
RL101
RL102
R104
SPEAKER A (L CH)
SPEAKER B (L CH)
J102
L-A
L-B
W208
R103
R101
L101
C101
C102
D104
R102
GRA
W211
TO MAIN AMP PCB(GND)
TO TONE CONTROL PCB W45
TO V AMP PCB W3
TO V AMP PCB W4
TO MAIN AMP PCB(L ch OUT)
94V0
A2057A503B

SP TERMINAL PCB A2057A503B


POWER
SW1
C401
A2057A503D
94V0
TO FUSE PCB
③
AC IN

POWER SW PCB
A2057A503D


TO CONNECTOR(4) PCB P6
TO CONNECTOR(6) PCB P8
TO TR PCB WW1
TO MAIN AMP PCB W211
TO TONE CONTROL PCB W46
TO TONE CONTROL PCB W43
TO MAIN AMP PCB W210
TO CONNECTOR(3) PCB P5
TO CONNECTOR(5) PCB P7
TO TONE CONTROL PCB W42
TO SPEAKER TERMINAL PCB J102
TO TR PCB WW2
TO SPEAKER TERMINAL PCB J102
TAPE 3
TAPE 2
TAPE 1
P.B
REC
R
L
J1
J2
J3
J4
J5
J6
J7
J8
J9
J10
J11
J12
J13
THERMO
W1
W2
W3
W4
NFB
IC1
M5218P
-15V G +15V
-55V G +55V
Rch
Lch
OUT
G
Nch
Pch
C1
C1b
C2
C2b
C3
C3b
IN
A2057A504A
P02 94V0
F
E
D
C
B
A
1
2
3
4
TO INPUT SELECTOR PCB W21
TO INPUT SELECTOR PCB W22

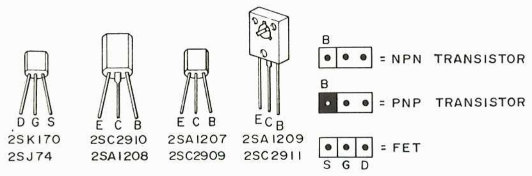
V-AMP PCB A2057A504A

LOCATION OF COMPONENTS

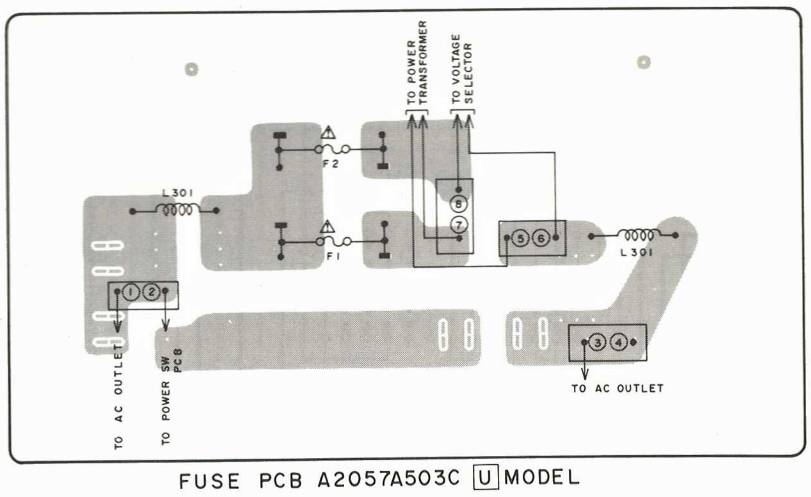
IC
IC1........C1

CONNECTORS
J1........F3
J2........F1
J3........F1
J4........E1
J5........E1
J6........D1
J7........D1
J8........D1
J9........C1
J11.......B1
J12.......D4
J13.......B4

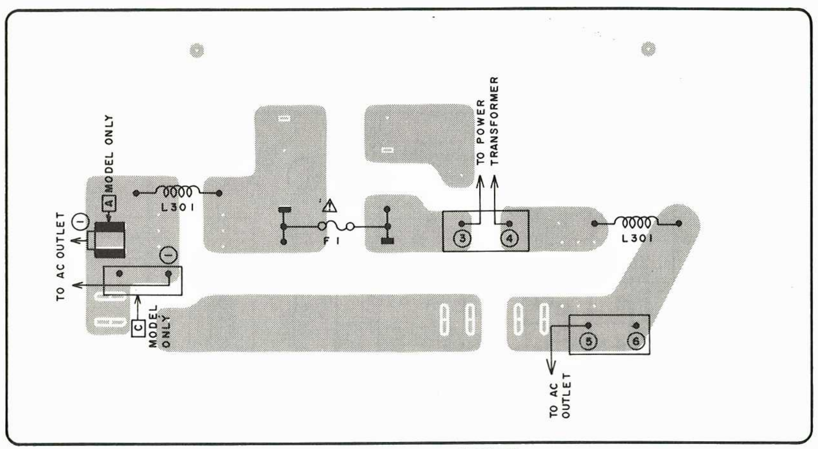
TRANSISTORS
TR1........A3
TR1b.......C3
TR2........A3
TR2b.......C3
TR3........A3
TR3b.......C3
TR4........B3
TR4b.......D3
TR5........B3
TR5b.......D3
TR6........A3
TR6b.......C3
TR7........A3
TR7b.......C3
TR8........A3
TR8b.......C3
TR9........A3
TR9b.......C3
TR10.......B3
TR10b......D3
TR11.......A3
TR11b......C3
TR12.......B3
TR12b......D3
TR13.......A2
TR13b......C2
TR14.......B2
TR14b......D2
TR15.......A2
TR15b......C2
TR16.......B2
TR16b......D2


D G S
2SK170
2SJ74
E C B
2SC2910
2SA1208
E C B
2SA1207
2SC2909
E C B
2SA1209
2SC2911
B
= NPN TRANSISTOR
B
= PNP TRANSISTOR
= FET
S G D

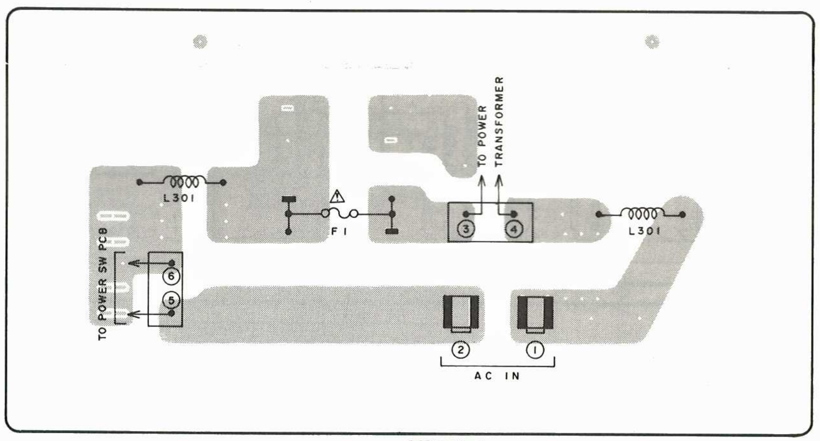
* Indicated -⩘- are V model only


TO POWER TRANSFORMER
TO VOLTAGE SELECTOR
F2
F1
L301
L301
⑧
⑦
⑤
⑥
①
②
③
④
TO AC OUTLET
TO POWER SW PCB
TO AC OUTLET

FUSE PCB A2057A503C U MODEL

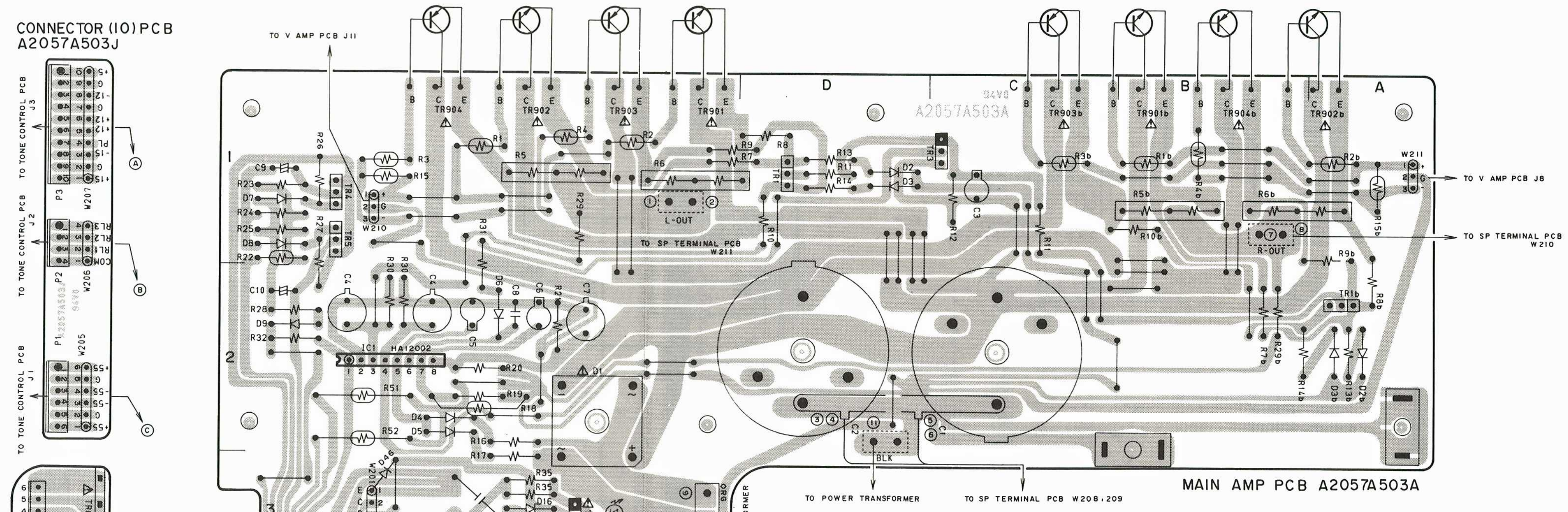
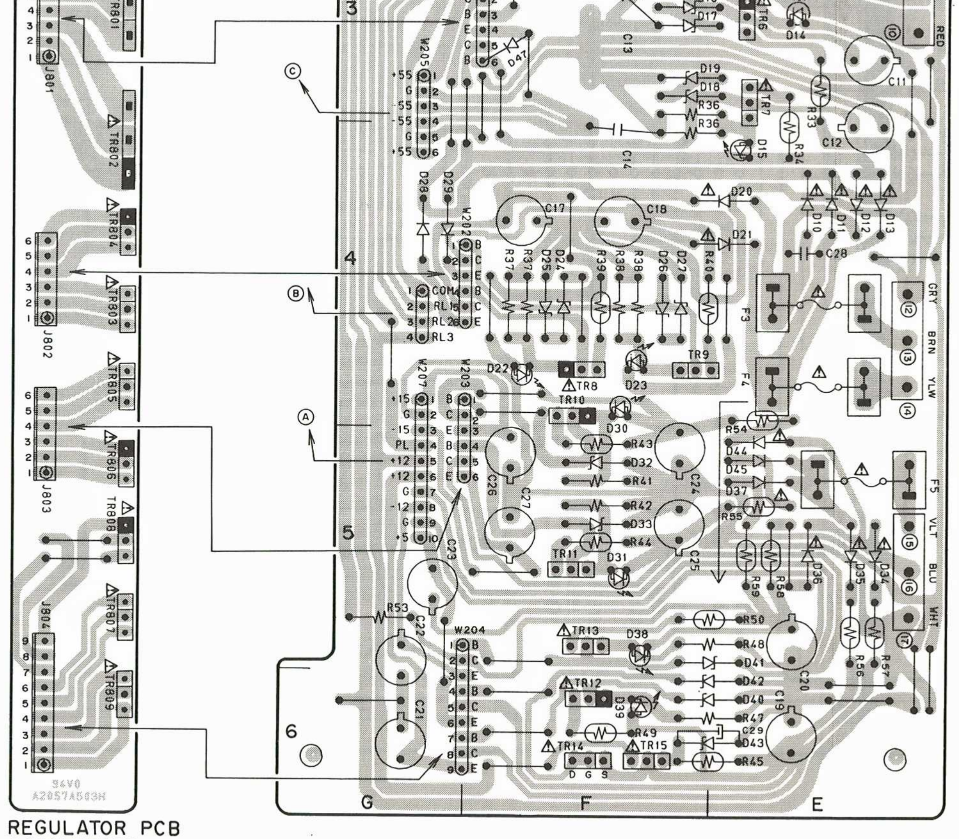

A MODEL ONLY
TO AC OUTLET
C MODEL ONLY
TO POWER TRANSFORMER
L301
F1
L301
①
②
③
④
⑤
⑥
TO AC OUTLET

FUSE PCB A2057A503C A C MODEL


TO POWER TRANSFORMER
L301
F1
L301
③
④
⑥
⑤
TO POWER SW PCB
②
①
AC IN

FUSE PCB A2057A503C E V B MODEL

CONNECTOR (IO) PCB
A2057A503J



TO TONE CONTROL PCB J3
TO TONE CONTROL PCB J2
TO TONE CONTROL PCB J1
P3
P2
P1
W207
W206
W205
Ⓐ
Ⓑ
Ⓒ
TO V AMP PCB J11
TR904
TR902
TR903
TR901
TR903b
TR901b
TR904b
TR902b
94V0
A2057A503A
L-OUT
TO SP TERMINAL PCB W211
R-OUT
TO V AMP PCB J8
TO SP TERMINAL PCB W210
IC1 HA12002
BLK
TO POWER TRANSFORMER
TO SP TERMINAL PCB W208,209
TO POWER TRANSFORMER
TO POWER TRANSFORMER
TO POWER TRANSFORMER
ORG
RED
GRY
BRN
YLW
VLT
BLU
WHT
A
B
C
D
E
F
G
1
2
3
4
5
6
J801
J802
J803
J804
TR801
TR802
TR804
TR803
TR805
TR806
TR808
TR807
TR809
94V0
A2057A503H

REGULATOR PCB
A2057A503H

MAIN AMP PCB A2057A503A

LOCATION OF COMPONENTS

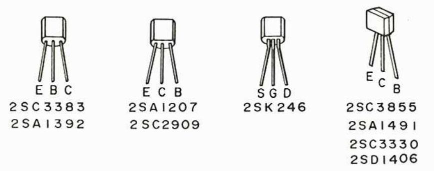
IC
IC1 ·········· F2

CONNECTOR
W201 ········ F3
W202 ········ F4
W203 ········ F5
W204 ········ F6
W205 ········ F3
W206 ········ F4
W207 ········ F5

TRANSISTOR
TR1 ········ D1
TR1b ········ A2
TR3 ········ C1
TR4 ········ F1
TR5 ········ F1
TR6 ········ E3
TR7 ········ E3
TR8 ········ F4
TR9 ········ E4
TR10 ········ F4
TR11 ········ F5
TR12 ········ F6
TR13 ········ F5
TR14 ········ F6
TR15 ········ E6
TR901 ······ D1
TR901b ······ B1
TR902 ······ E1
TR902b ······ A1
TR903 ······ E1
TR903b ······ C1

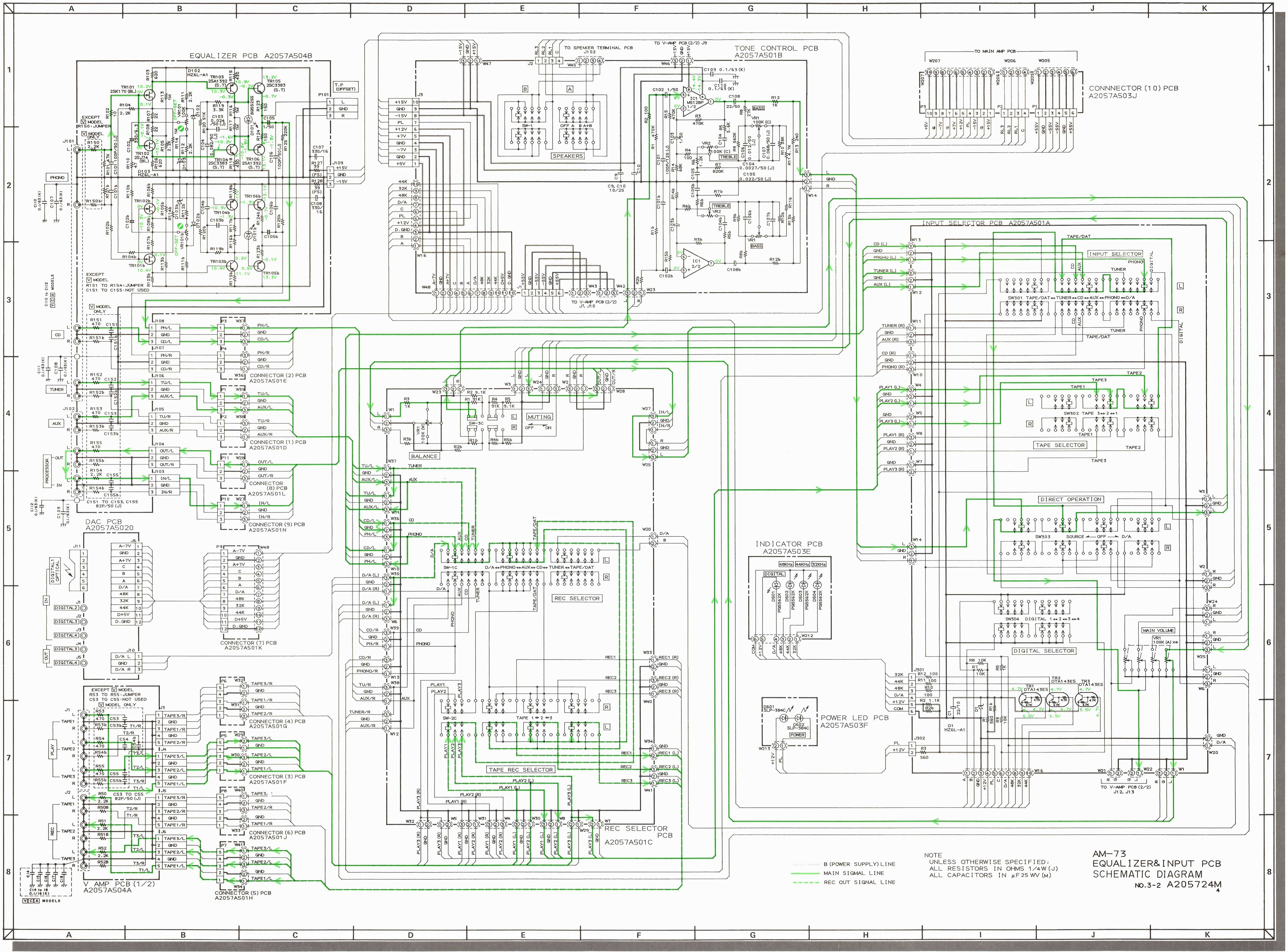
B ●•• = PNP TRANSISTOR

B ••• = NPN TRANSISTOR


E B C
2SC3383
2SA1392
E C B
2SA1207
2SC2909
S G D
2SK246
E C B
2SC3855
2SA1491
2SC3330
2SD1406

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

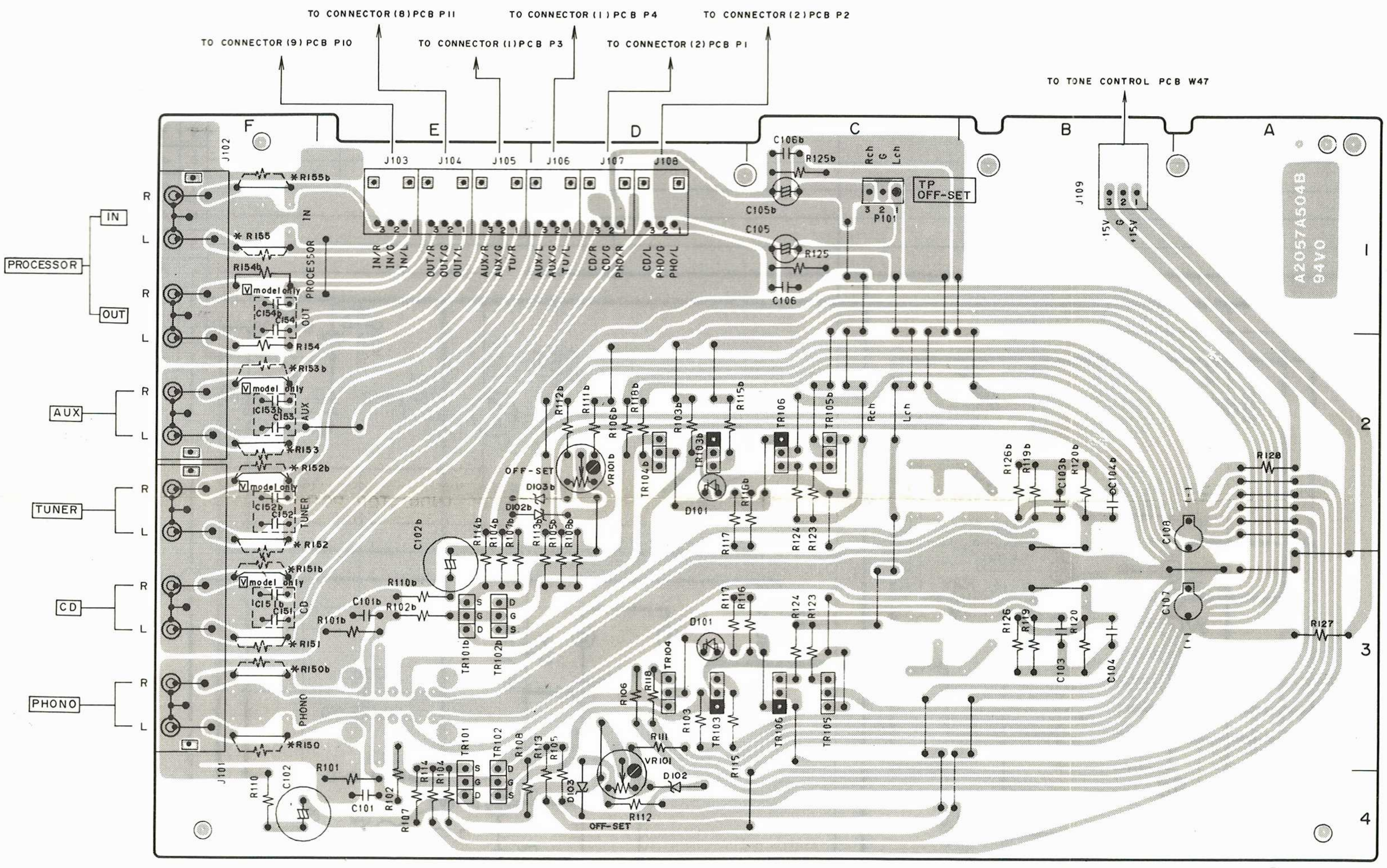
AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT


EQUALIZER PCB A2057A504B
TONE CONTROL PCB A2057A501B
TO SPEAKER TERMINAL PCB
TO V-AMP PCB (2/2) J9
TO MAIN AMP PCB
CONNNECTOR (10) PCB A2057A503J
SPEAKERS
TREBLE
BASS
INPUT SELECTOR PCB A2057A501A
INPUT SELECTOR
SW301 TAPE/DAT ↔ TUNER ↔ CD ↔ AUX ↔ PHONO ↔ D/A
SW302 TAPE 3 ↔ 2 ↔ 1
TAPE SELECTOR
DIRECT OPERATION
SW303 SOURCE ← OFF → D/A
SW304 DIGITAL 1 ↔ 2 ↔ 3 ↔ 4
DIGITAL SELECTOR
MAIN VOLUME
VR1 100K (A) X4
PHONO
CD
TUNER
AUX
PROCESSOR
OUT
IN
CONNECTOR (2) PCB A2057A501E
CONNECTOR (1) PCB A2057A501D
CONNECTOR (8) PCB A2057A501L
CONNECTOR (9) PCB A2057A501N
BALANCE
MUTING
OFF ON
DAC PCB A2057A5020
DIGITAL OPTICAL
DIGITAL 1
DIGITAL 2
DIGITAL 3
DIGITAL 4
CONNECTOR (7) PCB A2057A501K
TO V-AMP PCB (2/2) J7, J10
REC SELECTOR
D/A ↔ PHONO ↔ AUX ↔ CD ↔ TUNER ↔ TAPE/DAT
TAPE REC SELECTOR
TAPE 1 ↔ 2 ↔ 3
REC SELECTOR PCB A2057A501C
INDICATOR PCB A2057A503E
48KHz 44KHz 32KHz
DIGITAL
POWER LED PCB A2057A503F
POWER
TO V-AMP PCB (2/2) J12, J13
V AMP PCB (1/2) A2057A504A
CONNECTOR (4) PCB A2057A501G
CONNECTOR (3) PCB A2057A501F
CONNECTOR (6) PCB A2057A501J
CONNECTOR (5) PCB A2057A501H
TAPE1
TAPE2
TAPE3
PLAY
REC
EXCEPT V MODEL R150: JUMPER
V MODEL ONLY
EXCEPT V MODEL R151 TO R154: JUMPER C151 TO C155: NOT USED
C151 TO C153, C155 82P/50 (J)
EXCEPT V MODEL R53 TO R55: JUMPER C53 TO C55: NOT USED V MODEL ONLY
C53 TO C55 82P/50 (J)
C110 to C112 VCA MODELS
C14 to 18 0.1/16(K)
VCA MODELS
T.P (OFFSET)

NOTE
UNLESS OTHERWISE SPECIFIED;
ALL RESISTORS IN OHMS 1/4W (J)
ALL CAPACITORS IN μF 25WV (M)

B (POWER SUPPLY) LINE
MAIN SIGNAL LINE
REC OUT SIGNAL LINE

AM-73
EQUALIZER & INPUT PCB
SCHEMATIC DIAGRAM
NO.3-2 A205724M

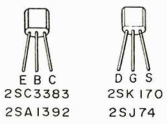

TO CONNECTOR (8) PCB P11
TO CONNECTOR (1) PCB P4
TO CONNECTOR (2) PCB P2
TO CONNECTOR (9) PCB P10
TO CONNECTOR (1) PCB P3
TO CONNECTOR (2) PCB P1
TO TONE CONTROL PCB W47
PROCESSOR
IN
OUT
AUX
TUNER
CD
PHONO
A2057A504B
94V0
TP OFF-SET
OFF-SET

EQUALIZER PCB A2057A504B

B ▯●▯●▯●▯ = NPN TRANSISTOR

B ■●▯●▯●▯ = PNP TRANSISTOR

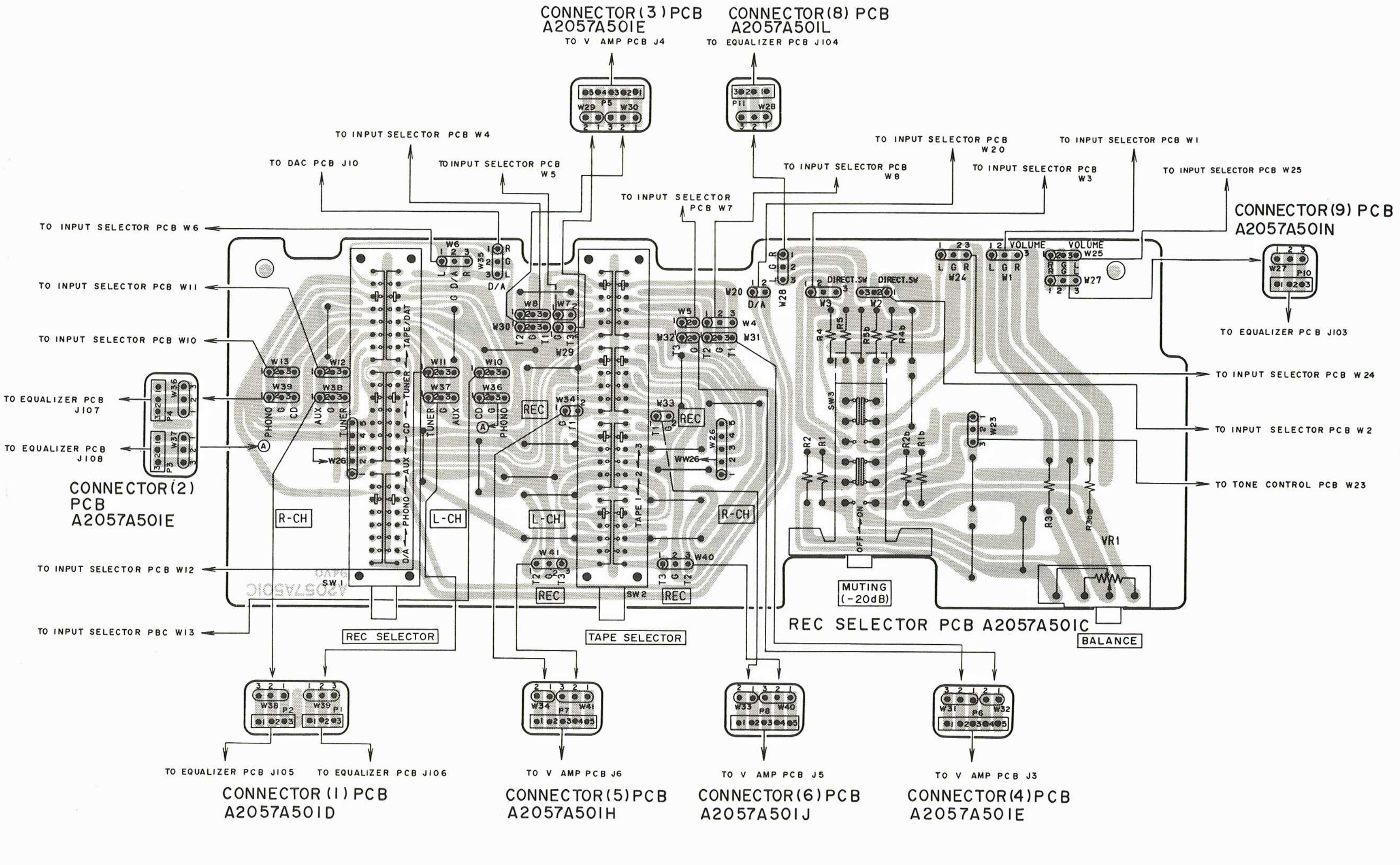
▯●▯●▯●▯ = FET
S G D

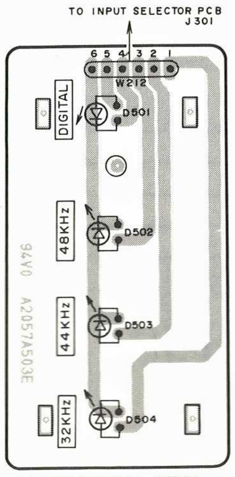

E B C
2SC3383
2SA1392
D G S
2SK170
2SJ74

✱ Indicated -⁄\/\/- are [V] model only

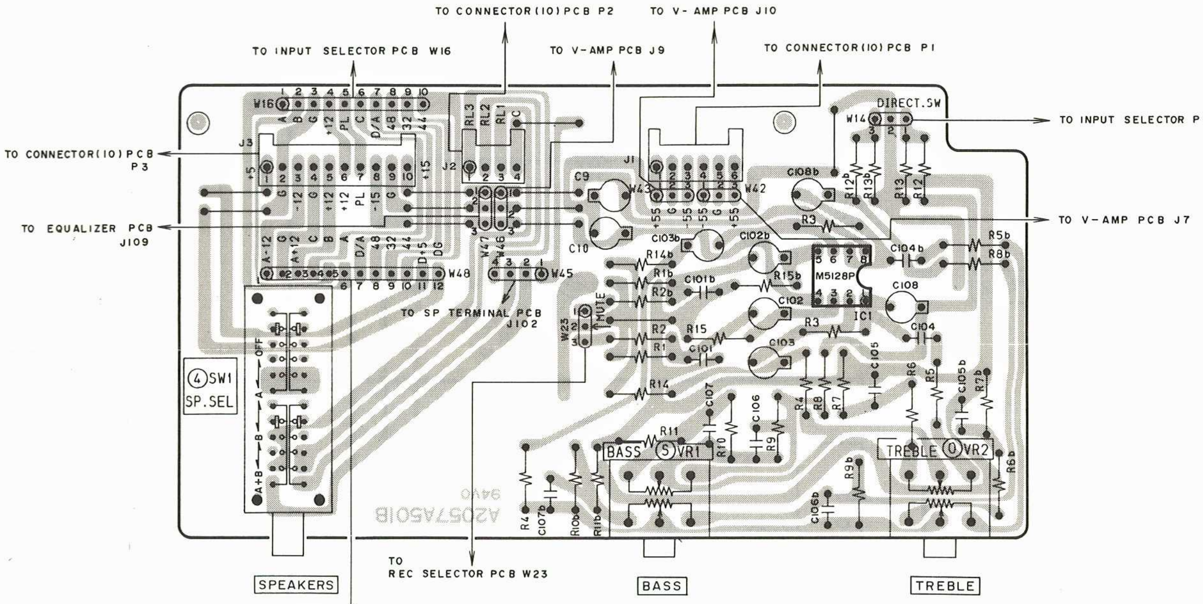
LOCATION OF COMPONENTS

TRANSISTOR				CONNECTOR			
TR101	E4	TR104	D3	J101	F3	J107	D1
TR101b	E3	TR104b	D2	J102	F1	J108	D1
TR102	E4	TR105	C3	J103	E1	J109	B1
TR102b	E3	TR105b	C2	J104	E1	P101	C1
TR103	D3	TR106	C3	J105	E1		
TR103b	D2	TR106b	C2	J106	D1		

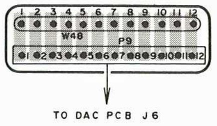

CONNECTOR (3) PCB A2057A501E
TO V AMP PCB J4
CONNECTOR (8) PCB A2057A501L
TO EQUALIZER PCB J104
TO INPUT SELECTOR PCB W4
TO DAC PCB J10
TO INPUT SELECTOR PCB W5
TO INPUT SELECTOR PCB W7
TO INPUT SELECTOR PCB W8
TO INPUT SELECTOR PCB W20
TO INPUT SELECTOR PCB W3
TO INPUT SELECTOR PCB W1
TO INPUT SELECTOR PCB W25
CONNECTOR (9) PCB A2057A501N
TO EQUALIZER PCB J103
TO INPUT SELECTOR PCB W6
TO INPUT SELECTOR PCB W11
TO INPUT SELECTOR PCB W10
TO EQUALIZER PCB J107
TO EQUALIZER PCB J108
CONNECTOR (2) PCB A2057A501E
TO INPUT SELECTOR PCB W12
TO INPUT SELECTOR PBC W13
TO INPUT SELECTOR PCB W24
TO INPUT SELECTOR PCB W2
TO TONE CONTROL PCB W23
VOLUME
DIRECT.SW
MUTING (-20dB)
VR1
BALANCE
R-CH
L-CH
REC
REC SELECTOR
TAPE SELECTOR
REC SELECTOR PCB A2057A501C
TO EQUALIZER PCB J105
TO EQUALIZER PCB J106
CONNECTOR (1) PCB A2057A501D
TO V AMP PCB J6
CONNECTOR (5) PCB A2057A501H
TO V AMP PCB J5
CONNECTOR (6) PCB A2057A501J
TO V AMP PCB J3
CONNECTOR (4) PCB A2057A501E


TO INPUT SELECTOR PCB J301
6 5 4 3 2 1
W212
DIGITAL
D501
48KHz
D502
44KHz
D503
32KHz
D504
94V0
A2057A503E

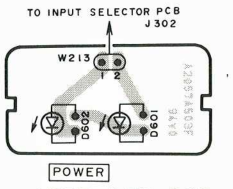
INDICATOR PCB
A2057A503E


TO CONNECTOR(10)PCB P2
TO V- AMP PCB J10
TO INPUT SELECTOR PCB W16
TO V-AMP PCB J9
TO CONNECTOR(10)PCB P1
TO CONNECTOR(10)PCB P3
TO EQUALIZER PCB J109
TO INPUT SELECTOR PCB W14
TO V-AMP PCB J7
TO SP TERMINAL PCB J102
TO REC SELECTOR PCB W23
W16
J3
J2
J1
RL3
RL2
RL1
W42
W43
W45
W47
W48
W23
DIRECT.SW
W14
M5128P
IC1
C9
C10
C101
C102
C103
C104
C105
C106
C107
R1
R2
R3
R4
R5b
R6b
R8b
R12
R13
R14
R15
④SW1 SP.SEL
BASS ⑤VR1
TREBLE ⓪VR2
MUTE
A2057A501B
94V0
SPEAKERS
BASS
TREBLE

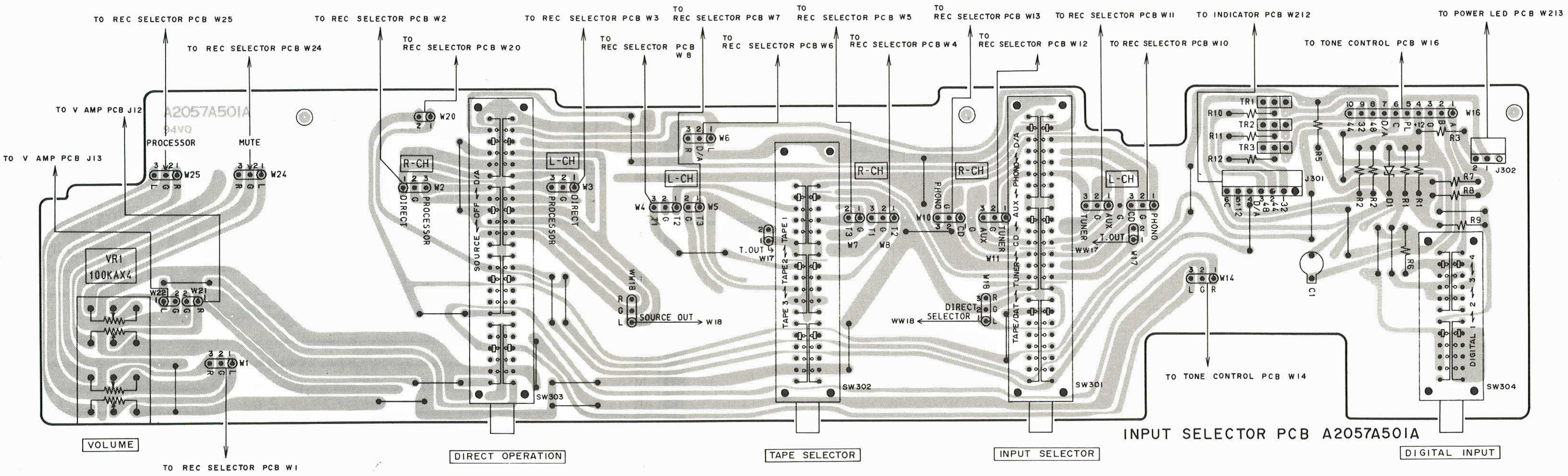
TONE CONTROL PCB A2057A501B


1 2 3 4 5 6 7 8 9 10 11 12
W48
P9
TO DAC PCB J6

CONNECTOR (7) PCB


TO INPUT SELECTOR PCB J302
W213
1 2
D602
D601
A2057A503F
94V0
POWER

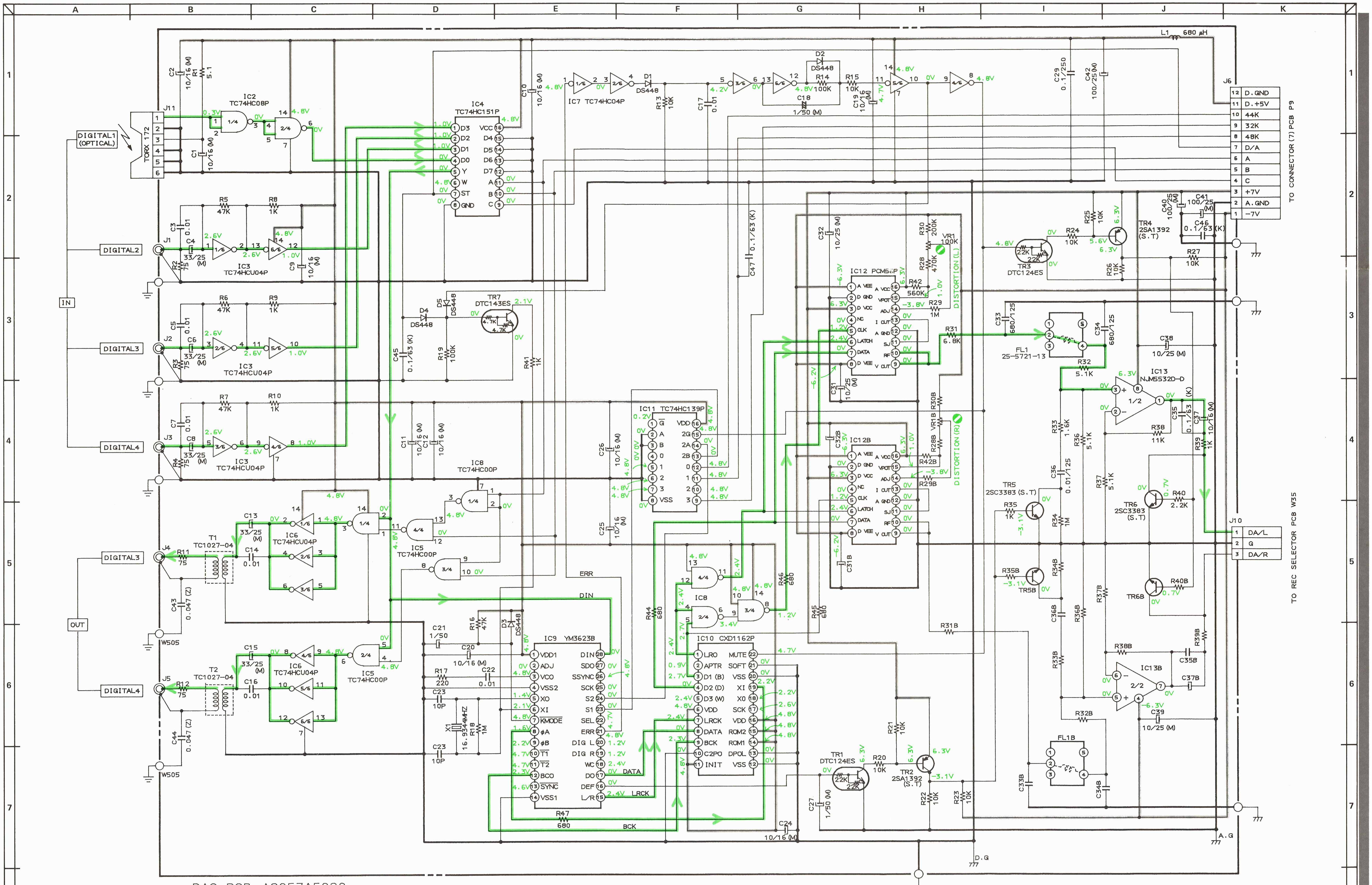
POWER LED PCB
A2057A503F


TO REC SELECTOR PCB W25
TO REC SELECTOR PCB W24
TO V AMP PCB J12
TO V AMP PCB J13
TO REC SELECTOR PCB W2
TO REC SELECTOR PCB W20
TO REC SELECTOR PCB W3
TO REC SELECTOR PCB W8
TO REC SELECTOR PCB W7
TO REC SELECTOR PCB W6
TO REC SELECTOR PCB W5
TO REC SELECTOR PCB W4
TO REC SELECTOR PCB W13
TO REC SELECTOR PCB W12
TO REC SELECTOR PCB W11
TO REC SELECTOR PCB W10
TO INDICATOR PCB W212
TO TONE CONTROL PCB W16
TO POWER LED PCB W213
TO TONE CONTROL PCB W14
TO REC SELECTOR PCB W1
A2057A501A
94V0
PROCESSOR
MUTE
W25
W24
VR1 100KAX4
W22
W21
W1
R-CH
L-CH
DIRECT
PROCESSOR
SOURCE OUT
W18
WW18
T.OUT
W17
SW303
SW302
SW301
SW304
TAPE 1
TAPE 2
TAPE 3
PHONO
AUX
TUNER
CD
DIRECT SELECTOR
TR1
TR2
TR3
J301
J302
C1
W16
W14
DIGITAL 1
VOLUME
DIRECT OPERATION
TAPE SELECTOR
INPUT SELECTOR
DIGITAL INPUT

INPUT SELECTOR PCB A2057A501A

●●● = NPN TRANSISTOR

DTA143ES


DIGITAL1 (OPTICAL)
TORX 172
J11
IC2 TC74HC08P
DIGITAL2
DIGITAL3
DIGITAL4
IN
OUT
IC3 TC74HCU04P
IC4 TC74HC151P
IC5 TC74HC00P
IC6 TC74HCU04P
IC7 TC74HC04P
IC8 TC74HC00P
IC9 YM3623B
IC10 CXD1162P
IC11 TC74HC139P
IC12 PCM56P
IC12B
IC13 NJM5532D-D
IC13B
TR1 DTC124ES
TR2 2SA1392 (S.T)
TR3 DTC124ES
TR4 2SA1392 (S.T)
TR5 2SC3383 (S.T)
TR6 2SC3383 (S.T)
TR7 DTC143ES
T1 TC1027-04
T2 TC1027-04
FL1 25-5721-13
FL1B
X1 16.9344MHZ
L1 680 µH
D1 DS448
D2 DS448
D3 DS448
D4 DS448
D5 DS448
VR1 100K
VR1B
DISTORTION (L)
DISTORTION (R)
DIN
ERR
DATA
LRCK
BCK
W505
J6
12 D.GND
11 D.+5V
10 44K
9 32K
8 48K
7 D/A
6 A
5 B
4 C
3 +7V
2 A.GND
1 -7V
TO CONNECTOR (7) PCB P9
J10
1 DA/L
2 G
3 DA/R
TO REC SELECTOR PCB W35
A.G
D.G

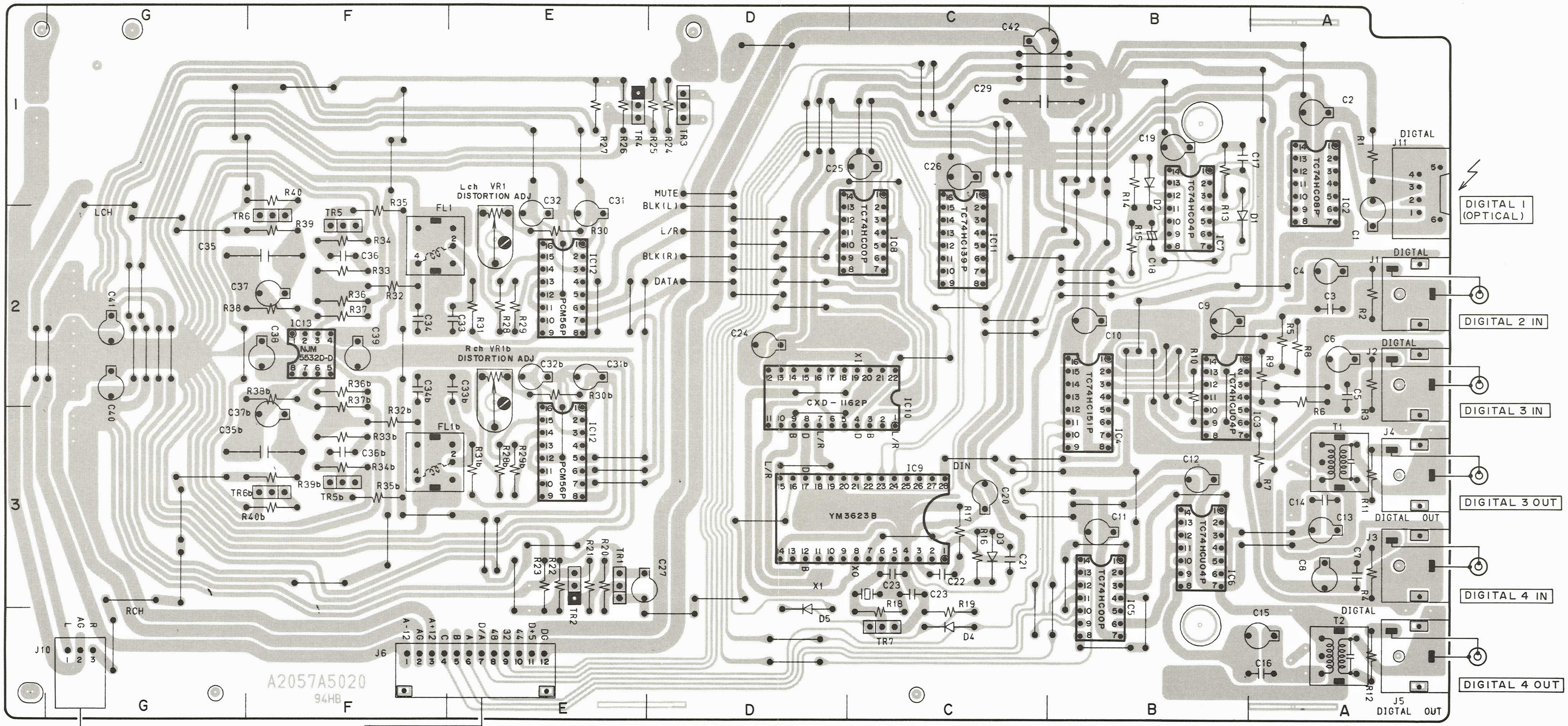
DAC PCB A2057A5020

B (POWER SUPPLY) LINE
SIGNAL LINE

NOTE
UNLESS OTHERWISE SPECIFIED;
ALL RESISTORS IN OHMS 1/4W (J)
ALL CAPACITORS IN µF50WV (J)

AM-73
DAC PCB
SCHEMATIC DIAGRAM

NO.3-3 A205725M


G
F
E
D
C
B
A
1
2
3
LCH
RCH
MUTE
BLK(L)
L/R
BLK(R)
DATA
Lch VR1 DISTORTION ADJ
Rch VR1b DISTORTION ADJ
FL1
FL1b
NJM 5532D-D
IC13
PCM56P
IC12
CXD-1162P
IC10
YM3623B
IC9
DIN
TC74HC00P
IC8
TC74HC139P
IC11
TC74HCU04P
IC7
TC74HC08P
IC2
TC74HC151P
IC4
IC3
IC5
IC6
X1
X0
T1
T2
J10
J6
J11
DIGTAL
DIGITAL 1 (OPTICAL)
DIGITAL 2 IN
DIGITAL 3 IN
DIGITAL 3 OUT
DIGITAL 4 IN
DIGITAL 4 OUT
DIGTAL OUT
J1
J2
J3
J4
J5
A2057A5020
94HB

DAC PCB A2057A5020

TO REC SELECTOR PCB W35

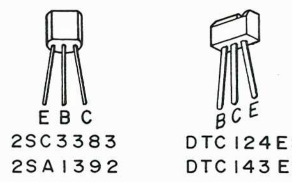
TO CONNECTOR (7) PCB P9

LOCATION OF COMPONENTS

IC		TRANSISTOR		CONNECTOR	
IC2	A1	TR1	E3	J6	E4
IC3	B2	TR2	E3	J10	G4
IC4	B2	TR3	D1		
IC5	B3	TR4	E1		
IC6	B3	TR5	F2		
IC7	B2	TR5b	F3		
IC8	C2	TR6	F2		
IC9	C3	TR6b	F3		
IC10	D2	TR7	C4		
IC11	C2				
IC12	E2				
IC12b	E3				
IC13	F2				

B ■●● = PNP TRANSISTOR

B ●●● = NPN TRANSISTOR


E B C
2SC3383
2SA1392
B C E
DTC124ES
DTC143ES